



भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं० 19] नई दिल्ली, शनिवार, मई 13, 1989 (वैशाख 23, 1911)
No. 19] NEW DELHI, SATURDAY, MAY 13, 1989 (VAISAKHA 23, 1911)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
Separate paging is given to this Part in order that it may be filed as a separate compilation

भाग III—खण्ड 2

[PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 13th May 1989

ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,
Todi Estates, III Floor, Lower Parel (West),
Bombay-400 013.

Telegraphic address "PATOFFICE".

The States of Gujarat, Maharashtra, and Madhya Pradesh, and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Patent Office Branch,
Unit No. 401 to 405, III Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

Telegraphic address "PATENTOFIC".

1—67 GI/89

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadivi, Minicoy and Aminidivi Islands.

Patent Office (Head Office),
"NIZAM PALACE", 2nd M.S.O. Building,
5th, 6th and 7th Floor,
234/4, Acharya Jagadish Bose Road,
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS"

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

CORRIGENDA

In the Gazette of India, Part-III, Section-2 dated 29th October, 1988 under the heading "PATENTS SEALED" delete the number 161621.

The following numbers be deleted from the Patents sealed notification dated 15th April, 1989, from the Gazette of India :—

163082 163083 163086 163087 163090 163092 163094
163096 163097 163151 163152 163153 163171 163174
163175 163176 163177 163178 163179.

REGISTRATION OF PATENT AGENTS

The following person has been registered as Patent Agent.

Shri B. N. Atrishi,
No. 108, Gautam Nagar,
New Delhi-110 049.

Alteration of an entry in the Register of Patent Agents under Rule 103 of the Patents Rules, 1972.

In pursuance of an application on Form 52, the addresses of the Place of residence and Principal Place of business of Shri R. Vasudeva Pai have been altered to :—

37, Purna Das Road,
Calcutta-700 029.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under section 135, of the Patents Act, 1970.

The 5th April 1989

258/Cal/89. Walter Whitson-Fischman, Magnetically influenced homeopathic pharmaceutical formulations, methods of their preparation and methods of their administration.

259/Cal/89. Smit Offshore Contractors B.V. Drill-And/Or Production system for oil and/or Gas.

The 6th April, 1989

260/Cal/89. United Parcel Service of America, Polygonal Information Encoding Article, Process and System.

261/Cal/89. Beloit Corporation, Apparatus for Separating material by length.

262/Cal/89. Vita Maschinenbau GmbH., Apparatus for the heat treatment and/or drying of a web of material passing continuously through.

263/Cal/89. Ukrainsky Institut Inzhenerov Vodnogo Khozyaystva USSR, Electrolyzer for removing fluorine, containing impurities from water.

264/Cal/89. Dilip Kripal Jhanglani, A diesel engine modified for running on petrol when required.

The 7th April, 1989

265/Cal/89. Ausimont S.r.l. Use of perfluoropolyethers in the form of an aqueous emulsion for protecting stony materials from atmospheric agents.

266/Cal/89. Ausimont S.r.l. Use of perfluoropolyether derivatives in the form of an aqueous emulsion for protecting stony materials from atmospheric agents.

267/Cal/89. Ausimont S.r.l. Use of perfluoropolyether emulsions for protecting stony materials from atmospheric agents.

268/Cal/89. Vsesojuzny Nauchno-Issledovatel'sky I Proektny Institut Aluminievoy, Magnievoy I Elektrodoznoi Promyshlennosti, Heat Exchange Apparatus.

The 7th April, 1989

269/Cal/89. E.I. Du Pont De Nemours and Company, Azeotropic Composition of 1, 1-Difluoro-2, 2-Dichloroethane and acetone.

270/Cal/89. E.I. Du Pont De Nemours and Company, Low pour crude oil compositions.

271/Cal/89. Afflval, Method of desulphurising cast iron.

272/Cal/89. Dipl. Ing. Kurt Stangl. Process of marking hot steel ingots.

The 10th April, 1989

273/Cal/89. Robin Bose, An apparatus for chlorinating water.

274/Cal/89. Metallgesellschaft Aktiengesellschaft, Fluidizing Combustion Chamber.

275/Cal/89. Moskovsky Fiziko-Tekhnicheskyy Institut, USSR Artificial Heart.

276/Cal/89. Tecnostral S.A. Industria E. Tecnologia, Color sorting apparatus.

APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH AT TODI ESTATES, 3RD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

The 13th March, 1989

62/Bom/1989. Surendra Jeet Singh Sandhu. New type two stroke International combustion engine 'Sandhu Engine'.

63/Bom/1989. Indian Petrochemicals Corporation Ltd. Method for the conversion of nitriles to amides employing improved active copper catalysts.

The 14th March, 1989

64/Bom/1989. Hindustan Lever Ltd. 1st November, 1985 & 22nd May, 1986. Great Britain. A powder suitable for use as a base for a granular detergent compositions or a component thereof.

65/Bom/1989. Ingole Vijay Tulshiram. An electrical machine.

66/Bom/1989. Genesis Chempest Private Limited. An improved electrical heating device.

The 16th March, 1989

67/Bom/1989. Hoechst India Ltd. Novel facile process for the preparation of penicillin N mono sodium salt.

The 17th March, 1989

68/Bom/1989. Taraprakash Prabhakar Vartak, Dr. Abdulla Ahmed Khatri & Madhukar Shankar Godbole. Improved anaerobic digestion process for distillery effluent by using semi-permeable membranes.

69/Bom/1989. Taraprakash Prabhakar Vartak, Dr. Abdulla Ahmed Khatri & Madhukar Shankar Godbole. An improved process for recycling the alcohol distillery spent wash effluent after fractionation with semi-permeable membranes.

OPPOSITION PROCEEDINGS

(1)

The application for Patent No. 149136 made by Versatile Manufacturing Limited in respect of which an opposition was entered by Shri Sukh Dev Singh as notified in the Gazette of India, Part III, Section 2 dated the 17th April, 1982 has been treated as withdrawn.

(2)

The opposition entered by Christine Hoden (India) Pvt. Ltd. on 13th November, 1987 to the grant of Patent on application No. 160084 made by Personal Products Company has been treated as dismissed.

(3)

The application for Patent No. 158196 made by Kingsley Corporation Private Limited in respect of which an opposition was entered by Shalmer Group Private Limited as notified in the Gazette of India, Part III, Section 2 dated 11th April, 1987 has been treated as refused.

(4)

The application for Patent No. 155169 made by PHB Weserhutte A.G. in respect of which an opposition was entered by Usha Breco Ltd., as notified in the Gazette of India, Part III, Section 2 dated the 17th August, 1985 has been treated as refused.

PATENTS SEALED

154773	155665	161621	162757	162891	162923	162937
162992	163019	163102	163104	163112	163114	163187
163218	163233	163274	163275	163276	163306	163310
163316	163334	163344	163350	163357	163376	163397
163398	163401	163410	163411	163412	163415	163417
163426	163427	163428	163434	163437	163442	163453
163460	163476	163477	163480	163482	163490	163496
163512	163520.					

CAL—23
BOM— 2
DEL—19
MAS— 7.

NO PATENTS

158923	155160	146373	150278	152755	153147	157883
158294	147936	157959	161389	161302	144999	149791
149372	150346	162379.				

AMENDMENT PROCEEDINGS UNDER SECTION 57

(1)

Notice is hereby given that Westinghouse Electric Corporation, of Westinghouse Building Gateway Centre, Pittsburgh, Pennsylvania 15222, United States of America, a Corporation organised and existing under the laws of the State of Pennsylvania, United States of America have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for Patent No. 162010 for "Switch Gear Apparatus". The amendments are by way of disclaimer.

The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office, 234/4, Acharya Jagadish Bose Road, Nizam Palace, Calcutta-700 020 or copies of the same can be had on

payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification at the Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall left within one month from the date of filing the said notice.

(2)

Notice is hereby given that I, Amitava Ghose Dastidar, Foundation Consultant, of 5, Hungerford Court, 12/1, Hungerford Street, Calcutta-700 017, West Bengal, India, an Indian National, has made an application under Section 57 of the Patents Act, 1970 for amendment of specification of his application for Patent No. 154685 for "Reinforced Concrete piles".

The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office, 234/4, Acharya Jagadish Bose Road, Nizam Palace, Calcutta-700 020 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification at the Patent Office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall left within one month from the date of filing the said notice.

(3)

Notice is hereby given that Krishan Kumar Chetal 141-147, Electric Road, Fourth Floor, Block "B" Hong-Kong has made an application on form-29 under Section 57 of the Patents Act, 1970 for amendment of specification of their application for Patent No. 160750 (894/D/84) for Improved Air Cooler. The amendments are by way of change of address for service.

The application for amendment and the proposed amendment can be inspected free of charge at the Patent Office Branch, Unit No. 401 to 405, 3rd Floor, Municipal Market Building, Saraswati Marg, Karol Bagh, New Delhi-110005, or copies of the same can be had on payment of usual copying charges.

Any person interested in opposing the application for amendment may file a notice of opposition in form-30 within three months from the date of this notification at Patent Office Branch, Unit No. 401 to 405, 3rd Floor, Municipal Market Building, Saraswati Marg, Karol Bagh, New Delhi-110 005. If the Written Statement of Opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice.

AMENDMENT

Specification No. 162290

In pursuance of leave granted on 7th April, 1989 under Section-78 of the Patents Act, 1970 the Specification has been amended as follows :

IN CLAIM 1.

Line 18, Page-28 : DELETE "Cyclizing prepared Compound in a known" and, DELETE lines 19 to 22 and INSERT "and then converting the thus prepared compound in a known manner into a compound of the formula I of the drawings".

IN THE DESCRIPTION :

Line 25, Page 6 : DELETE "Cyclizing the prepared". and INSERT "and then converting the thus prepared".
Line 26, Page 6 : DELETE "to give" and INSERT "in to".

Line 27, Page 6 : DELETE "if desired reacting the prepared compound", and,
DELETE lines 28 to 30.

AMENDMENT UNDER SECTION-78 OF THE PATENTS ACT, 1970

In Patent Specification No. 162290 the following amendment has been amended.

IN CLAIM 1

Line 18, Page-28 : DELETE "Cyclizing the prepared compound in a known", and, DELETE lines 19 to 22 and INSERT "and these converting the thus prepared Compound in a known manner into a compound of the formula-I of the drawings".

IN THE DESCRIPTION :

Line 25, Page 6 : DELETE "Cyclizing the prepared" and INSERT "and then converting the thus prepared".

Line 26, Page 6 : DELETE "to give" and INSERT "in to".

Line 27, Page 6 : DELETE "if desired reacting the prepared Compound". and,

DELETE line 28 to 30.

ASSIGNMENT UNDER SECTION 69 OF THE PATENTS ACT, 1970

PATENT NOS. 144293 & 147773

In pursuance of the order of the Deputy Controller of Patents & Designs dated 4th April 1989 and in pursuance of an application received on the 6th January, 1989 Walter Industries Inc., a Delaware Corporation of 1500 North Dale Mabry Highway, Tampa, Florida 33631, U. S. A. Registered as Proprietor.

COMMERCIAL WORKING OF PATENTED INVENTIONS

LIST NO. V. ELECTRICAL

The following patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of Calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	2	3	4
155531	12-12-1975	Alcan Research & Development Limited, 1, Place Ville, Marie Montreal, Quebec, Canada.	Anodized aluminium coloured by means of optical interference effects and process for treatment of Anodized aluminium to produce such effects.
156502	21-10-1981	ARC Technologies Systems Ltd., Box 61, Grant Cayman, Cayman Island, British West Indies.	Electrode for arc furnace.
152793	05-06-1980	Asahi Kasei Kogyo Kabushiki Kaisha, 2-6, Dojimahama 1-chome, Kita-ku, Osaka-shi, Osaka, Japan.	Fluorinated cation exchange membrane and process for preparing the same.
153536	24-12-1980	Do.	A method for the preparation of a hydrogen-evolution electrode.
154740	11-12-1980	Do.	A method for the manufacture of an alkali metal hydroxide, chlorine gas and hydrogen gas.
158264	26-05-1982	Bolmet Inc. Louisa Viens Drive, Dayville, State of Connecticut 06241, U.S.A.	Metallized electrode strip and electric capacitor having the same.
156594	15-03-1982	Chronar Corporation, Princeton, New Jersey, U.S.A.	A method of preparing a semiconductor material particularly for producing semiconductor devices.
145535	15-05-1976	Deane Hilleman, 870, El Chorro Way sacramento California 95825, U.S.A.	An apparatus for measuring respiratory air flow of a patient and displaying it together with an optimised respiratory air flow
144945	28-04-1975	Delle Alsthom 130 Rue Leon Blum, 69611, Villeurbanne, France.	High voltage cut out devices with sealing devices.

1	2	3	4
151362	08-03-1979	Energy Conversion Devices Inc., 1675 West Maple Road, Troy, Michigan 48064, U.S.A.	A semiconductor device and a method of making the same.
151380	15-03-1979	Do.	A method of producing an amorphous semiconductor film and the film so produced.
156202	09-12-1982	Do.	A single or multiple cell type improved photovoltaic device and a method of making the same.
157288	07-09-1981	Do.	An improved multiple cell photo responsive amorphous device.
157308	07-09-1981	Do.	A method of making an improved photo-responsive amorphous Germanium based alloy.
158453	22-04-1983	Do.	Improved dischargeable battery and electrode used therein.
158272	19-05-1983	Ersa Ernst Sachs Kg GmbH & Co., Leonhard-Karl-Str. 24, D-6980 Wertheim/main, West Germany.	Circuit arrangement for controlling the operative temperature of the heater of an electric soldering apparatus.
148239	20-02-1978	Ferranti Limited, Hollinwood Lancashire, England.	Data Processing system.
148642	16-03-1978	Ferranti Limited, Bridge House, Park Road, Gatley Cheadle, Cheshire SK 8 4Hz, England.	Data processing apparatus.
158642	22-04-1983	Fisher Controls International Inc., 7711 Bonhome, Clayton, Missouri-63105, U.S.A.	System for controlling the mechanical position of a controlled device.
158375	16-02-1983	Hazeltine Corporation, Greenlawn, New York-11740, U.S.A.	A receiver for receiving a composite signal.
152290	11-09-1980	Hermann Schwabe, Wasenstrasse 25, D-7067, Urbach, West Germany.	Process for the production of E-shaped core laminations and I shaped return core laminations of an impedance coil or of a transformer, especially for glow-discharge lamps.
152783	19-09-1980	Hiroshi Ishizuka 19-2, Ebara 6-chome, Shinagawa-ku, Tokyo, Japan.	Improvements in an apparatus for electrolytic production of magnesium metal from its chloride.
153352	30-11-1981	Do.	Improved electrolytic cell for magnesium chloride.
150299	03-03-1979	Hitachi Ltd. 5-1, 1-chome, Marunouchi, Chiyoda-ku, Tokyo, Japan.	Zinc-oxide surge arrester.
156927	27-07-1982	Do.	On-load tap changing transformer.
157537	17-12-1982	Innocente Riganti Officine Meccaniche S.P.A. Via Vittorio Veneto, 1, Solbiate Arno Italy.	Spacer-damper for a bunched conductor of an electric line.
158103	28-04-1982	John Stephen Nitschke, 324, East Second Street, Perrysburg, Ohio 43551, U.S.A.	Control system for monitoring and controlling the processing of glass sheets in a glass processing environment.
150842	07-04-1979	John Stewart Lawson Baker, Kings House, Tillington, Petworth, Sussex, England.	Process and apparatus for spraying liquid.
154833	24-01-1980	Kiepe Elektrik GmbH, Thorner Strasse, 1, 4000 Dusseldorf, West Germany.	Electrical disconnecting mechanism.
145920	09-06-1976	Kirloskar Oil Engines, Laxmanrao Kirloskar Road, Poona-411003, State of Maharashtra, India.	As electronic device for the reversal of the direction of rotation of an electric motor.
156675	23-11-1982	Krone GmbH, Goerrallu 311, 1000 Berlin 37, West Germany.	Modular plug connector.

1	2	3	4
157383	27-07-1982	Leonard Richard Kohn, 137 East 36th Street, New York, N.Y. 10016, U.S.A.	An envelope detector for receiving an amplitude modulated carrier signal.
150795	14-02-1980	Leybold-Heraeus GmbH, Bonner Strasse 504, 5000 Köln 51, West Germany.	An electrode clamping device for electromelting plants.
149562	06-12-1978	Menk Apparatebau GmbH, 5439 Bad Marienberg, West Germany.	Radiator for cooling the oil of oil-filled transformer.
150502	11-07-1979	Messwandler-Bau A G Nürnbergerstr 199 D-8600 Bamberg West Germany	Transformer winding.
157319	22-05-1982	Mosaic System Inc. 1497 Maple Lane Troy Michigan 48034, U.S.A.	A substrate for integrated circuitry.
157022	09-03-1983	N.G. Kamat C/o D Prabhu 5th Floor Saraswati Niket 5 Camac Street Calcutta	Improvements in or relating to single phase or polyphase kilowatt hour meters or energy meters.
150786	06-11-1978	Orozio De Nora Impianti Electrochimici S.P.A. Via Bistolfi 35, Milan, Italy.	A method of generating chlorine by electrolysis brine.
157361	16-08-1982	Projects & Development India Ltd., C.I.F.T. Bldg., P.O. Sindri, Dist. Dhanbad Bihar, Pin 828122, India.	Solid state audio-visual alarm annunciator.
157972	16-09-1982	Raymond Emmett Mc. Istyre, 31 Southern Cross Drive, Cronin, Island, Surfers Paradise, Queensland, Australia 4217.	Improvements in or relating to electrical connection devices.
139623	26-06-1974	RCA Corporation, 30 Rockefeller Plaza New York, New York-10020, U.S.A.	A method of etching silicon oxide to produce a tapered edge thereon.
141988	26-10-1974	Do.	Semiconductor devices and method of making same.
142824	18-07-1974	Do.	Semiconductor device with heat sink.
144099	28-04-1975	Do.	Method and apparatus of cleaning a surface of an article.
144541	19-04-1976	Do.	Integrated circuit device both N-channel and P-Channel insulated gate field effect transistor.
147572	02-01-1978	Do.	Semiconductor device and method of making thereof.
147578	02-01-1978	Do.	Multilayered passivating structure for semiconductor devices and method of fabricating the same.
147965	07-11-1977	Do.	A semiconductor device.
148328	28-02-1978	Do.	Semiconductor devices.
149514	14-12-1978	Do.	Improved passivating method for the production of an integrated circuit device.
150097	04-07-1978	Do.	Apparatus for optically testing the lateral dimensions of a diffracting grating pattern of material disposed on a substrate.
150616	02-01-1979	Do.	An integrated circuit structure particularly for CMOS/SOS integrated circuits.
155987	20-07-1981	Do.	Process for forming a tapered opening in a glass passivating coating on the surface of a semiconductor body.
150662	11-04-1979	Satake Engineering Co. Ltd., No. 1-9-10, Ueno, Taito-ku, Tokyo, Japan.	Automatic control apparatus for a grain separator.
157734	24-03-1982	Siddons Industries Ltd. Research Road, Pooraka in the city of South Australia, Australia.	A method of fusing fusible oxide compounds of metals/non metals, for example slag in an electrical furnace and an electric furnace to carry out said method.

1	2	3	4
153856	15-01-1982	Skoda Koncernovy Podnik, 31600 Plzen 16, Czechoslovakia.	Circuit arrangement for protecting the excitation circuit of a synchronous machine with a rotor winding feed over slip rings.
154488	15-01-1982	Do.	Circuit arrangement for protecting a current leading circuit of synchronous machines.
153703	20-05-1981	Societe Cen-compagnie Electromecanique & C.I.E.S.N.C. of 37 Rue de Rocher 75383 Paris, Cedex 08, France.	A device for control of the electrical braking for a direct current motor.
153736	27-01-1981	Sulzers Brothers Limited, CH-8401, Winterthur, Switzerland.	A method of producing magnesium from a magnesite or dolomite.
146049	22-07-1976	The Newall Engineering Company Limited, Oundle Road, Peterborough, PE 2 CBL, England.	Piston detectors for measuring relative movement and/or displacement.
156185	02-07-1982	Trutzschler GmbH & Co. Kg, Durenstrasse 82-92, D-4050 Monchengladbach 3, West Germany.	Apparatus for transmitting signals between a fixed station and a mobile station to a power-driven, textile machine.
140475	21-10-1975	Union Carbide India Ltd. Middleton Street, Calcutta-700016, West Bengal, India.	Flashlights or electric torches.
142056	21-10-1975	Do.	Rotary switch mechanism in and for an electric torch or flashlight.
153608	16-10-1980	Do.	Improved push button switch.
159093	24-08-1983	Voeat-Alpine AG, A-1011 Vienna, Friedrichstrasse 4, Austria.	Device for determining the position of the cutting lead of drift advancing machine of a winning machine.
149720	13-04-1978	Westinghouse Electric Corporation, Westinghouse Bldg., Gateway Centre, Pittsburgh, Pennsylvania 15222, U.S.A.	Electrical insulating bushings.
152078	13-05-1980	Do.	A dynamoelectric machine.
152288	31-07-1980	Do.	Dynamoelectric machine having enhanced unbalanced stator current capability.
154229	28-12-1979	Do.	Vacuum circuit interrupters.
155577	07-01-1982	Do.	Electrical interconnection apparatus.
155687	01-02-1982	Do.	Metal enclosed switchgears and method of making same.
155961	28-04-1982	Do.	Method of forming electric coil structures and electric coil.
155973	13-01-1983	Do.	Static vat generator.
155990	26-11-1981	Do.	Laminated magnetic cores.
156453	22-11-1982	Do.	Condenser bushings for high voltage electrical apparatus.
156613	13-12-1982	Do.	Motor control apparatus with true RMS non sinusoidal negative sequence stator current protection mode.
156954	26-08-1982	Do.	Electrical apparatus having temperature probe for monitoring the temperature at a predetermined location of the winding in the apparatus.
157000	07-10-1982	Do.	Improved electrical apparatus having leak detection means.
156729	13-10-1982	Do.	Three-phase transformer core.
157018	15-01-1983	Do.	Vacuum detector.
157079	16-10-1982	Do.	Electrical power transformers.

1	2	3	4
157334	02-03-1983	Westinghouse Electric Corporation Westinghouse Bldg., Gateway Centre, Pittsburg, Pennsylvania 15222, USA.	Oil resistant insulated bondable electrical conductors and method of making the same.
157384	17-08-1982	Do.	Apparatus and method for manufacturing magnetic cores for electrical machines.
157403	27-01-1983	Do.	Arrangement for laser scribing of dendritic web silicon cells.
157464	20-01-1983	Do.	Static VAR generators and network stabi- lizers.
157578	27-07-1983	Do.	Perchloroethylene containing dielectric fluid for electrical apparatus and electrical apparatus comprising the same.
157665	27-07-1983	Do.	Do.
157764	26-05-1982	Do.	Vacuum interrupter with a specially modu- lated axial magnetic field contact.
157853	10-01-1983	Do.	High power resonance filters.
158104	29-07-1982	Do.	Capacitor apparatus.
158455	05-05-1983	Do.	Apparatus employing supersaturated vapour dielectrics.
158541	19-05-1983	Do.	Rotary switches.
158593	22-04-1982	Do.	Low DC voltage high current switch assembly.
158643	27-04-1983	Do.	Ferrous sheet steel members having thereon cured, insulating phosphate coating and a method for producing the same.
158662	07-06-1983	Do.	Device for continually upgrading low va- pour-pressure dielectric fluids.
158667	15-06-1983	Do.	Electrical transformers.
158790	25-05-1983	Do.	Transposed assembly of electrically conduc- tive sheets and method of making same.
156584	02-08-1982	Wimco Ltd., Indian Mercantile Chambers, Ramjibhai Kamani Marg, Ballard Estate, Bombay-400038.	A magnetite electrode.
156583	02-08-1982	Do.	A process for the manufacture of magnetite electrodes.
149704	15-12-1978	Yokogawa Electric Works Ltd. 9-32 Nakacho 2-chome, Musashino, Shi, Tokyo, Japan.	Servo-system.
152723	05-03-1979	Yokogawa Hokushin Electric Corporation, 9-32, Nakacho, 2-chome, Musashino-shi, Tokyo, Japan.	Capacitor type differential pressure trans- mitter system.

COMMERCIAL WORKING OF PATENTED INVENTIONS.

CHEMICAL LIST-V

The following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by Patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the Invention
1	2	3	4
155527	10-14-1975	Alcan Research and Development Ltd., 1, Place ville Marie Montreal, Quebec, Canada.	Method of producing improved metal alloy products.
150767	29-12-1978	Alfa-Laval Aktibolog Postack 5, 147 00 Tumba Sweden	A method for the production of ethanol.
152343	29-1-1980	Do.	A method for producing ethanol by fermentation.
155103	8-4-1981	American Can Co., American Lane, Greenwich, Connecticut 06830, USA.	A multilayer polymeric laminate with drying agent therein.
157118	17-11-1981	Do.	A polymeric laminate having solid layers and method for manufacturing the same.
151805	6-5-1980	Asahi Kasei Kogyo Kabushiki Kaisha 2-6, Dojima-hama 1, Chome, Kita-ku, Osaka, Japan.	Method for producing carboxylic esters.
153146	12-12-1980	Do.	Separation of rare earth metals.
153431	1-12-1980	Do.	Process for producing fluorinated cation exchange membrane.
154418	1-12-1980	Do.	Process for preparing novel fluorinated cation exchange membrane.
156691	23-12-1981	Do.	A process for the separation of elements by chromatography.
149600	21-1-1980	Ashok Ranjan Das Gupta C/o. Eastern Carbons, "Sheh-Milan" Telephone Exchange Road, Dhanbad-826001, Bihar.	Process for producing special quality low ash metallurgical coke.
153750	20-10-1981	Do.	Improvement in a process for the production of special quality low ash metallurgical coke.
156653	21-1-1982	Aziende Chimiche Riunite Francesco A.C.R.A.F. spa. Viale Amelia, 70 Rome, Italy.	Process for preparing [(1-Benzyl-1-H-indazol-3-yl) oxy] acetic acid salt with lysine.
145922	23-6-1976	Bamag Verfabreustechnik GmbH Butzbach/Hessen, West Germany.	Coal gasification process.
156122	25-2-1982	Biogal Gyogyszergyar Debrecen, Pallagi ut 13, Hungary.	A process for preparing new aminoacridine- α - and/or β -(D)-N-glycoside-and/or aminoacridine- α -and/or β -(L)-N-glycoside and/or O-acetyl derivatives and their salts.
149181	19-5-1979	Birla Research Institute for Applied Sciences Birlagram 456331, Nagda, Madhya Pradesh,	A process for the manufacture of dissolving grade pulp suitable for production of rayon stable fibre with reduced air and liquid stream pollution.
155246	18-6-1982	Do.	Process for the manufacture of high strength viscose rayon fabrics.
151560	31-1-1981	Campomarzi, Impianti S.R.L. Milano 20145, via Massena 4, Italy.	A method and apparatus for continuous recovery of trivalent chromium from tannery discharge waters.

1	2	3	4
152339	19-12-1979	Ceskoslovenska Akademie Ved Praha 1, Czechoslovakia.	Method and apparatus for treating waste organic materials to obtain phosphate containing concentrate of organic compounds to be used as fertilizer or fodder.
155662	7-1-1983	Do.	Process for producing cell catalysts for biotransformation.
144941	17-2-1977	Chisso Corporation 1, Sozecho, Vitaku, Osaka, Japan, Osaka.	Method for producing vinyl chloride polymers
157337	8-3-1983	David S. Hodes, Cricket Lane, Dobbs Ferry, New York-10522, USA. Grace Leidy, 21 Glenwood Avenue, Leonia, New Jersey, 07605, USA.	A process for producing the narrow-spectrum antibiotic staphylocidin having selective antimicrobial activity against staphylococci including S. Aureus and S. Epidermidis.
155626	21-10-1981	Davy McKee Corporation, P.O. Drawer 5000, Lakeland, Florida 33803, U.S.A.	A method for wet grinding phosphate rock with mineral acid water.
142433	10-12-1976	Edward Kocoplman, 4424 Bergamo Drive Encino California 91316, U.S.A.	Process for upgrading lignitic type coal as a fuel.
157041	27-5-1983	F.C.N. S.r.l., Via S. Bosco, 3-Treviglio (Bergamo) Italy.	Process for the preparation of an organic compound of selenium exhibiting antineoplastic activity.
156247	29-7-1982	Fidia S.P.A. Via Ponte Della Fabbrica 3-A, 35031 Abano-Terme (Padova) Italy.	A method for preparing inner ester ganglioside derivatives.
156298	29-7-1982	Do.	Process for preparing organic amide compounds derived from nitrogenous lipids.
157952	15-3-1982	Formica Limited, Coast Road, North Shields, Tyne & wear, NE 29 8 RE, England.	A process and apparatus for continuous production of water soluble phenol formaldehyde resins.
152258	11-9-1979	General Electric Co., 1, River Road, Schenectady 5, New York, U.S.A.	A process for producing a polycrystalline body of a predetermined shape.
156679	16-7-1983	Hans Thomn Wisenweg 6, D-5439 Hohn, West Germany.	A process for preparing a hair restorer.
156032	5-5-1981	I.C.I. PLC, Imperial Chemical House, Mill bank London SW1P 3JF, England.	A process for the production of methanol.
156152	30-3-1981	Do.	A process for the production of a multilayer protective and/or decorative coating upon a substrate surface and a substrate so coated.
156544	17-8-1981	Do.	A process for the production of copolymers.
156777	11-6-1981	Do.	A process for producing a gas containing hydrogen.
156903	26-8-1981	Do.	A process for producing one or more carbon compounds from a carbonaceous feedstock.
157911	9-3-1982	Do.	Process for reacting carbon monoxide with steam.
143194	6-11-1974	I.C.I., Australia Ltd. & CSIRO 1, Nicholson Street, Melbourne, Victoria 3001, Australia Limestone Avenue, Campbell, Australia.	Process for the preparation of ion exchange resin-beads.
145110	28-6-1976	I.C.I. Australia Ltd., 1, Nicholson Street, Melbourne, Victoria 3001, Australia and Diamond Shamrock Corporation, 110 superior avenue—cleveland, ohio 44114, USA.	Process of making an amphoteric polymeric composition.
152389	20-6-1979	I.C.I. Australia Limited, 1, Nicholson street, Melbourne, Victoria 3001, Australia.	An improved process for the manufacture of ammonium nitrate prills or aggranules.

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139293	13-2-1974	Indian Explosives Ltd., 34, Chowringhee Lane Calcutta-700071, West Bengal.	Sensitised dry blasting composition and their method of preparation.
141324	5-5-1976	Do.	Cap-sensitive dry blasting agent compositions and method of preparing the same.
144922	12-5-1976	Do.	Sensitised dry blasting compositions and a method for preparing the same.
147983	29-6-1978	Do.	A process for the preparation of a stabilized hydroxyalkyl nitrate liquor.
150035	26-11-1979	Do.	Dry blasting explosive compositions having increased initiation sensitivity and method for the preparation thereof.
150613	21-1-1980	Do.	Process for the preparation of an improved sensitising liquor adapted for use with cap- sensitive small diameter slurried explosive compositions.
154196	21-1-1980	Do.	Improved cap-sensitive small diameter slur- ried explosive compositions and method for the production thereof.
155105	12-8-1982	Do.	An improved water-in-oil emulsion explosive composition and a method of preparing the same.
157795	1-10-1983	Do.	Improved water-in-oil emulsion explosive com- position sensitive to a No. 6 detonator even when prepared under low shear low speed mixing conditions and thome for production of such composition.
153693	11-12-1981	Indian Jute Industries Research Association, 17, Tattatola Road, Calcutta-700088, India.	A process for the treatment of jute fabrics to render them fire retardant when used as a barrier fabric.
151258	6-4-1979	Josef Meisner GmbH & Co., Bayenthalgurtel 16-20, 5000 Köln 51, West Germany.	Process for the continuous manufacture of nitric acid esters of polyhydric alcohols.
156822	10-9-1982	Kimura Kakoki Co., Ltd., 1-1, Aza Ueshima Kuise, Amagasaki-shi, Japan.	A process for evaporating and concentrating an aqueous acid solution.
151009	26-9-1979	Korb Engineering GmbH, Nausser Strasse 111, 4000 Dusseldorf 1, Federal Republic of Germany.	Process and apparatus for producing liquid crude iron and reduction gas.
157434	17-2-1983	Magyar Alumíniumipari Trószrt. 56 Pozsonyút, Budapest XXII, Hungary.	Improvements in or relating to the bayer type process for manufacturing aluminium from bauxite.
156467	7-12-1982	Meiji Seika Kaisha Ltd., 4-16 Kyobashi 2- chome, Chuo-ku, Tokyo, Japan.	Process for the production of 1-oxadethia- cephem derivatives.
156651	8-7-1983	Do.	Process for the production of 1-oxadethia- cephalosporin compound.
151406	7-3-1980	Mitsubishi Gas Chemical Co. Inc., 5-2, Maru- nouchi 2-chome, Chiyoda-ku, Tokyo, Japan.	Sodium hydrosulfite bleaching composition.
155904	31-3-1977	Mitsubishi Rayon Co., Ltd., 8, Kyobashi, 2-chome, Chuo-ku, Tokyo, Japan.	Stabilization process of methyl methacrylate.
156660	23-11-1981	Mitsui Toatsu Chemical Incorporated, No. 2-5, Kasumigaseki, 3-chome, Chiyoda-ku, Tokyo, Japan.	Process for producing rubber modified styrene resins.
156928	25-3-1982	Do.	An improved process for continuously pre- paring an organic isocyanate.
157879	28-7-1983	Do.	Method for the purification of propylene polymers.
158315	15-6-1982	Do.	A synergistic solvent composition for washing high molecular substances stuck on the interior of a production apparatus or molding apparatus.

1	2	3	4
155993	8-6-1982	Monsanto & Company, 800 North Lindbergh, Boulevard, St. Louis, Missouri 63177, USA.	Improvements in a process for the production of cyclohexylamine.
156432	12-3-1982	Do.	Process for catalytically hydrocracking a hydrocarbonaceous feed.
157351	11-3-1982	Do.	A process for catalytically hydrocracking a hydrocarbonaceous feed.
150737	2-3-1979	National Research Development Corporation 66-74 Victoria Street, London SW1, England.	A method for the separation of a gas from a fluid comprising said gas.
156875	14-1-1982	Neste OY, Keilaniemi 02150, Espoo 15, Finland.	Method of producing alkali-soluble cellulose carbamate.
158268	19-3-1983	Do.	A process for producing cellulose fibers optionally containing carbamate groups.
138143	20-12-1983	Newport Pharmaceuticals International Inc. 897 West 16th street, Newport Beach, California 92660 USA.	Process of preparing purine dihydrothiazols.
158178	21-7-1982	Nippon Kokan Kabushiki Kaisha, 1-2, Maru-nouchi, 1-chome, chiyoda-ku, Tokyo, Japan.	Method for the production of ferrochromium.
154774	27-2-1982	Nirlon synthetic Fibres & Chemicals Ltd., Nirlon House, 254-B, Dr. Annie Besant Road, Worli, Bombay-400025.	An improved process for the preparation of terephthalic diamide.
150213	21-11-1978	Nitto Boseki Co., Ltd., 1, Aza Higashi, Gonome, Fukushima-shi, Japan.	Glass composition housing fiber forming properties and alkali resistant glass fibres made therefrom.
158221	2-5-1984	Polska Akademia Nauk-centrum Badan Lodz ul, Boczna 5, Poland.	A method of producing amides of 5-/-Dialkoxythiophosphoryl Thioglycolic acid.
151606	17-9-1979	Projects & Development India Ltd., C.I.F.T. Bldg., P.O. Sindri, Pin-828122, Dhanbad,	An improved method for the recovery of copper and zinc values.
153088	1-11-1980	Do.	Process for the manufacture of nitrophosphate fertilisers from urea nitrate and rock phosphate.
166999	5-10-1982	Do.	A process for the production of NP fertilizer.
157688	26-11-1981	Do.	An improved process for obtaining stable granular NPK Fertilizer from incompatible raw materials.
157716	17-6-1982	Do.	A process for the manufacture of sodium dichromate from chromite ore or chromium slag.
157737	5-5-1983	Do.	Process for the preparation of catalyst for use in hydrogenation of carbon monoxide to methanol
157371	28-7-1982	Do.	An improved process for obtaining nitrophosphate fertilizer by the nitric acid rock phosphate route
157240	25-9-1984	Ribi Immunochem Research Inc, 581 N E Old Corvallis Road, P. O. Box 1409, Hamilton, Montana 59840, USA.	A method for preparing a therapeutic composition containing pyridine soluble extract refined detoxified endotoxin.
157241	23-5-1983	Do.	Method of preparing therapeutic composition.
157910	14-8-1984	Do.	A method of producing refined detoxified endotoxin.
157738	15-3-1984	Richter Gedeon Vegyeszeti Gyar RT. 19-21, Gyomrei Ut, Budapest X, Hungary.	Process for the preparation of thiazoline derivatives.

1	2	3	4
148139	2-8-1977	Singer & Hersch Industrial Development (Proprietary) Ltd., P.O. Box 39795, Bramley 2018, Transvaal, Republic of South Africa.	A substantially oil free and an emulsion free non acidic aqueous composition.
153213	2-8-1983	Societe National Elf Aquitaine (Production) Tour Aquitaine, 92400 Courbevoie, France.	Process for the synthesis of mercaptans from olefines and sulfure hydride by heteroger. catalysts.
143447	17-11-1976	Stamicarbon B.V. P.O. Box-10, Gelsen, The Netherlands.	Process and apparatus for oxidizing cyclo-alkenes.
153273	29-10-1980	Suncor Ltd., 20, Eglinton Avenue, West Toronto ontario, Canada-M4R 1K8.	An industrial process for the manufacture valuable material from natural deposits.
153565	30-7-1979	Suncor Inc., 10123-99th street, Edmonton, Alberta, Canada, TSg.	A process for preparing a hydrolyzed wheat, corn or potato starch composition for use as flocculant in destabilizing sludge suspension.
153622	30-7-1979	Suncor Ltd., P.O. Box 38, 500 4th Avenue, S.W. Calgary, Alberta T2P 2VS, Canada.	An industrial process for the recovery of valuable material from natural resaurves such as ores.
157179	26-3-1983	Teledyne Industries, Inc., Post office Box 759, Monroe, North Carolina, USA.	Method of producing a corrosion resistant nickel base alloy.
151076	15-5-1979	Terukichi Nagata, No. 32-28, 1-chome, Tobitakyu, chofu city, Japan.	Method and apparatus for producing calcium compost.
148782	2-8-1979	The Director General, Cement Research Institute of India, M-10 south Extension II, Ring, Road, New Delhi-110 049.	A process for the preparation of a ready mix concrete composition.
143877	29-10-1975	The Fertilizer (Planning and Development) India Ltd. P.O. Sindri, PIN-828122, Dhanbad, Bihar, India.	A method of the manufacture of sulphur from by product Gypsum.
150922	4-5-1979	Do.	A process for producing rock phosphate suitable for phosphoric acid manufacture from low grade rock phosphate.
152675	22-4-1980	Do.	A process for preparation of quick setting sealant based on epoxy resins.
154220	12-8-1981	Do.	An improved process for decarbonization and decolourisation of spent sulfuric acid.
157293	13-4-1982	Do.	An improved process for the production of guanidine nitrate.
157410	4-12-1981	Do.	A process for the production of NP fertilizers.
144134	16-9-1975	The Goodyear Tire & Rubber Company 1144 East Market Street, Akron ohio 44316 USA.	Improvements in or relating to the re-use of vulcanised rubbers.
140782	12-12-1974	The Lubrizol Corporation, P.O. Box 17100, Euclid station, cleveland, ohio 44117, USA.	Process for preparing phosphorus, nitrogen and sulfo-containing lubricant additives.
142326	5-12-1974	Do.	Process for preparing phosphorus, nitrogen and sulfo-coataining lubricant additives.
143388	9-6-1976	Do.	A composition for causing swelling of seals.
143602	12-12-1974	Do.	Process for the preparation of hydroxy alkyl hydroxy aromatic condensation products.
143660	13-2-1975	Do.	A method for preparing an oil-soluble nitrogen containing composition useful in lubricants and fuels.
144027	14-4-1977	Do.	A process for preparing a megnesium containing complex.
144308	27-11-1975	Do.	A method of producing nitrogen containing sulfurated Mannich condensation product useful as an additive for lubricants and normally liquids.

1	2	3	4
144604	30-8-1976	The Lubrizol Corporation, P.O. Box 17100 Euclid station, cleveland, ohio 44117, USA.	Process for the preparation of hydrocarbon-substituted methylol phenol compositions.
144940	8-2-1977	Do.	A lubricating composition.
145084	7-10-1976	Do.	Process for preparing amino phenol compounds.
145085	27-10-1976	Do.	A process for making a nitrogen-containing organic composition.
146833	1-7-1977	Do.	A process for preparing a nitrogen containing additives.
148713	27-7-1977	Do.	Method of making atleast one nitrogen containing organic compound from a substituted nitrophenol and a hydrazine compound.
149315	1-9-1978	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe Ohio, 44092, USA.	Process for preparing a sulfurized composition.
149553	6-2-1978	Do.	Lubricant compositions.
149615	4-9-1978	Do.	Process for preparing sulfurized composition.
150090	8-3-1979	Do.	Process for preparing an additive composition.
150959	30-4-1979	Do.	Lubricant compositions for use in engines to decrease the fuel consumption.
152732	16-4-1980	Do.	An improved phosphorus-containing lubricating compositions.
152910	11-4-1980	Do.	Process for preparing mixed metal salts useful as additive for lubricants or functional fluids.
153881	25-10-1979	Do.	Process for the preparation of carboxylic solubilizer/surfociant composition.
145083	7-10-1976	The Lubrizol Corporation, P.O. Box 17100 Euclid station cleveland, ohio, 44117, U.S.A.	A lubricant composition for two cycle engines.
152939	11-4-1980	The Lubrizol Corporation, 29400 Lakeland Blvd Wickliffe, Ohio 44092, U.S.A.	Process for the preparation of a nitrogen containing, phosphorus-free carboxylic acid derivative.
154056	14-11-1980	Do.	A process for preparing a lubricant additive comprising metal/metal compound metalloid complexes.
155231	5-9-1981	Do.	Improved crude oil composition.
155264	22-9-1980	Do.	Lubricant additive compositions of concentrate comprising sulfurized alkyl phenol and high molecular weight dispersant.
155285	5-9-1981	Do.	Mixed alkylesters of interpolymers for use in crude oils.
156085	22-9-1980	Do.	An improved lubricating oil having new lubricant additives.
156659	24-5-1983	Do.	A composition for use in oil based lubricants containing carboxylic acid derivatives of alkanol tertiary monoamines.
157101	11-4-1980	Do.	Phosphorus and sulfur containing lubricating composition and functional fluid compositions of improved thermal-stability.
157683	16-4-1980	Do.	A process for preparing phosphorous containing lubricant additive.

1	2	3	4
157985	25-9-1979	The Lubrizol Corporation, 29400 Lakeland Blvd Wickliffe, Ohio 44092, U.S.A.	An aqueous system comprising water and carboxylic solubilizer/surfactant composition.
158027	20-1-1983	Do.	A process for preparing corrosion inhibiting additive composition.
158265	5-4-1984	Do.	A process for preparing novel boron-con- taining compositions.
158598	8-9-1982	Do.	A process for preparing a composition for lubricating metal during working thereof.
160070	23-9-1983	The Secretary of State for Defence in per Britan- nic Majesty's Govt. Whitehall, London SW1 A 2HB, England.	A process for the production of an aluminium base alloy.
158150	30-3-1984	The University of Queensland, St. Lucia, Queensland 4067, Australia.	Process for conversion of sucrose to fructose and ethanol.
155375	19-9-1981	Toyama Chemical Co., Ltd. 2-5, 3-chome, Nishishinjuku, Shinjuku-ku, Tokyo, 160 Japan.	Process for preparing novel cephalosporins.
152670	20-3-1980	Toyo Engineering Corporation No. 2-5, Kasumigaseki 3-chome, chiyoda-ku, Tokyo, Japan.	A reaction vessel for catalytic gas phase reaction and process for conducting an exothermic reaction.
153575	25-11-1980	Do.	An improved process for the preparation of gaseous products from hydrocarbon contain- ing materials in apparatus having surface coated with heat resistant material free of Nickel.
136671	13-10-1982	Do.	Process for synthesizing urea.
156787	5-8-1982	Unilever PIC, Unilever House, Blackfriars, London EC 4P, England.	Plant growing compositions.
146241	7-4-1977	Union Carbide Corporation, 270 Park Avenue, New York, State of New York 10017, U.S.A.	Continuous hydroformylation process.
146305	16-5-1977	Do.	A foam composition for treating a fabric of paper substrate.
146324	16-5-1977	Do.	Process of treating fabrics with foam.
146408	24-1-1978	Do.	Improved hydroformylation process.
146661	6-7-1977	Do.	Improvements in or relation to hydroformy- lating an alpha-olefin.
146734	11-8-1977	Do.	A process for producing aldehyde product by rhodium catalyzed hydroformylation of alpha-olefin.
147429	24-1-1978	Do.	Improved hydroformylation process.
152790	27-3-1980	Do.	A process for preparing a hydroformylation medium and hydroformylation.
154537	24-10-1980	Do.	Improvement in hydroformylation process using stable rhodium catalyst.
144076	28-5-1975	United Technologies Corporation 1, Financial Plaza, Hartford, Connecticut 06101, U.S.A.	A method of preparing a coating composi- tion for improving the hot corrosion.
145818	16-8-1976	Do.	Process for preparing a thermally protected super alloy structure.
156112	14-12-1982	Veb Kombinat Fortschritt, Landmaschinen 8355 Neustadt in Sachsen, Berghaus Strasse 1, G.D.R.	An improved process and apparatus for separating butter grains and butter milk from a mixture thereof.
156853	12-2-1982	Do.	Process for producing water-free milk fat.
152799	29-8-1980	Versa Consultoria Tecnica Ltd. Rue Antunes Maciel, 337 Sao Cristovao, Rio de Janeiro-RJ, Brazil.	An improved process for the production of fuel alcohol without vinasse.
142008	16-5-1974	Warner-Lambert Company 201, Tabor Road, Morris Plains, New Jersey, 07950, U.S.A.	Method for removing hydrogen peroxide from soft contact lenses.

1	2	3	4
158596	21-7-1982	Westinghouse Electric Corporation Westinghouse Bldg. Gateway center, Pittsburgh, Pennsylvania-15222, U.S.A.	Method of preparing a clear partially hydro- lyzed alumina alkoxide solution.
154739	11-8-1980	W.L. Gore & Associates Inc., Newark, Delaware, U.S.A.	Sprayable composition and method for coating a substrate with said compositions.

COMMERCIAL WORKING OF PATENTED INVENTIONS MECHANICAL & GENERAL ENGINEERING

LIST NO. V.

The following patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by Patented in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name and Address of the patentee	Title of the invention
1	2	3	4
149425	25-5-1978	Aktiengesellschaft Kuhnle, Kopp & Kausch, Friedrich-Ebert-str. 16, 6710, Frankenthal/ Pfalz, West Germany.	Gas turbine particularly exhaust gas super turbocharger.
147181	19-10-1977	Albert Rex Fernandez, C/o Research, Designs and Standards Organisation, Lucknow, India.	A quick release mechanism for use in vacuum brake system of rolling stock.
147182	19-10-1977	Do.	A vacuum brake system for rolling stock.
149783	11-11-1975	Alcan Research and Development Limited, 1, Place Ville Marie, Montreal, Quebec, Canada.	Method of producing improved metal alloy products.
154547	15-10-1981	Allflex International Limited, 931 Tremaine Avenue, Palmerston North, New Zealand.	One-piece identification tags.
156101	12-1-1983	Do.	Animal ear tag applicator tools.
156123	30-3-1982	Alligator Ventilfabrik GmbH, Postfach 1120, 7928 Giengen/Brenz, West Germany.	Air valves for tubes or tyres.
143504	15-10-1975	American Can Co., American Lane, Green- wich Conn. 06830, U.S.A.	A method of drawing and ironing thinwalled cylindrical articles from flat metal sheet.
145689	7-3-1977	Do.	Method of manufacturing a coated metal container and container so produced.
155392	13-3-1981	Do.	Method of making a multi-layer article such as a container.
155669	13-3-1981	Do.	Apparatus for making a multilayered in- jection molded article such as containers.
157199	4-10-1982	Do.	Collapsible dispensing container having improved barrier insert in the container head piece.
149784	6-11-1975	American Flange & Manufacturing Co., Ltd., 30 Rockefeller Plaza, New York, 10020, U.S.A.	Improvements in or relating to drum closure.
154745	12-10-1982	Amitabh Datta, 237, Jodhpur Park, Calcutta-68, West Bengal, India.	A device for spraying liquid based chemi- cals.
153541	11-6-1981	Amtel Inc., 40, Westminster Street, Providence, Rhode Island 02903, U.S.A.	Mooring buoy for use in a system for an- choring or mooring ships.

1	2	3	4
157839	17-12-1982	Arthur Ernest Bishop, 17 Burton Street, Mosman, New South Wales, Australia.	Rack and pinion steering gear.
158109	4-6-1983	Do.	Method and apparatus for making steering rack bars.
147459	2-2-1977	Arthur Gneupal Bitzberg 5, Bachenulach, Switzerland.	Ozonizer.
152765	17-9-1980	A.S. Johnson, Jr, 1235 West Henderson Street, Salisbury, North Caroline, U.S.A.	A filter apparatus.
152804	24-10-1980	Do.	Apparatus for preheating an aggregate material in combination with a rotary kiln by a heated gas directed through the kiln.
152645	19-9-1980	Do.	Filter apparatus for filtering particulate material.
154746	29-7-1981	Do.	Bag-type filter with air diffuser tubes of helical construction.
156348	22-10-1981	Avulunga Pty. Ltd., 1, Elouera Street, Bray Park, New South Wales, Australia.	Improved laryngoscope blade.
142750	7-11-1974	Banamali Sen 20, Brindaban Mullick Lane, Calcutta-9, West Bengal, India.	Slot ovens.
155750	2-3-1982	Airoil-Flaregas Ltd., Harton Road, West Bayton, Middlesex UB 7 8BG, England.	Improvements in or relating to fuel burner assemblies.
150112	21-4-1981	Banamali Sen, 20, Brindaban Mullick Lane, Calcutta-9, West Bengal, India.	Carbonising furnace for domestic fuel.
157822	16-8-1983	Bajaj Auto Limited, Akurdi, Pune-411035, Maharashtra, India.	An improved seat for two wheeler vehicle.
157825	31-10-1983	Do.	Improvements in or relating to front wheel suspension of two wheeler and three wheeler motor vehicles.
158394	31-10-1983	Do.	A locking arrangement for locking components such as spare wheel, oil tank, fuse box, petrol tank, battery and tool box of a two wheeler motor vehicle.
158755	31-10-1983	Do.	Combined locking devices for steering and ignition system of motor vehicles.
150748	2-5-1979	Beloit Corporation, Beloit, Wisconsin, USA 53511.	Apparatus for reeling a plurality of ribbons particularly from a slit paper web onto a reel spool.
150953	11-8-1980	Do.	An improved extended nip press for removing water from a travelling web in a paper machine.
151642	3-9-1979	Do.	Apparatus and method for handling a continuously running creped tissue web.
151848	3-9-1979	Do.	A press mechanism for removing liquid from a travelling fibrous web.
152292	29-1-1981	Do.	A press mechanism for removing liquid from a travelling fibrous web.
152559	5-4-1980	Do.	A paper web making apparatus.
153018	9-3-1981	Do.	A paper web processing apparatus and method of processing the paper web.
154817	3-1-1981	Do.	An apparatus for forming a fibrous web and method of forming the said fibrous web.

1	2	3	4
156316	1-6-1982	Beloit Corporation, Beloit, Wisconsin, USA 53511	Improvements in a suction press roll for dewatering a travelling web in a paper making machine.
156488	10-3-1982	Do.	An apparatus for applying coating to both surfaces of a moving web and method of coating by the said apparatus.
156523	5-10-1982	Do.	A blade-type coating applicator for coating travelling paper webs.
157295	6-5-1982	Do.	Air knife coater for coating the surface of a travelling web.
157322	12-11-1982	Do.	A device for separating the marginal edge of a paper web formed on a foraminous travelling wire.
157429	3-9-1982	Do.	A blade type fountain coating applicator especially suitable for paper web coating and method thereof.
157753	5-7-1982	Do.	An assembly for collecting a pile of sheets discharged into a collection area from a sheeting machine and transferring said pile away from the collection area.
157983	8-6-1983	Do.	A system or arrangement for driving the rolls in cooperative upper and lower tiers of a paper machine dryer section.
159610	18-1-1982	Do.	An apparatus for high speed size application.
159744	2-9-1983	Do.	Improvement in paper making machine and particularly to method and mechanism for positive web press section of the machine.
148496	3-10-1977	Binishells New Systems Ltd. Julian's Court St. Julian's Ave St. Peter Port Guernsey Channel Island.	Method and apparatus for erecting substantially dome-like building structures.
145305	21-1-1976	Bureau BBR Limited Riesbachstrasse 57, Zurich Switzerland.	Upset head at a high-strength tension wire and method for the production thereof.
148514	8-6-1977	Do.	A wedge push-in apparatus for a wire tensioning press.
156855	7-4-1982	Central Mine Planning & Design Institute Ltd. Gondwana, Place, Kanke Road, Ranchi-834008 Bihar India.	Continuous carboniser for the Production of domestic coke from coal.
158269	19-4-1983	Charles Stuart Conway Featherbed Lane, New Vernon New Jersey 07976 USA.	Improved apparatus for separating a mixture of atleast two immiscible fluids.
149213	4-9-1979	Chefaro Pharmaceuticals Ltd. Himalaya House, 38, Chowringhee Road, Calcutta-700017.	Intra uterine contraceptive device.
155874	4-5-1982	Cipa Costruzione Iniettori Pompe Accessori S.P.A. Via G.C. Puecher, 6 Faderno Dugnano (Province of Milano) Italy.	Injector-pump for diesel engines.
155871	1-3-1982	C.M.F. Costruzioni Metalliche Finsider S.P.A. Guastice Cedi Livorni, 57110 Linorno, Italy.	A conveyor device for a storage plant.
149694	27-8-1979	College of Agriculture Department of Agriculture Engineering, Konkan Krishi Vidyapeeth, Dapoli, 415712, Dist.-Ratnagiri, Maharashtra.	A sickle.
157929	24-2-1983	Conoco Inc P.O. Box 1267, Ponca City, Oklahoma 74601 USA.	Delayed coking process for minimizing the the coke yield.
157450	2-3-1983	Crane Packing Ltd., Crossbow House Liverpool Road, Slough, England.	Seal for producing a liquid-tight closure between a rotary component and a partition separating two chambers.

1	2	3	4
145222	8-7-1975	Creusot Loire, 42, Rue D'Anjou, 75008, Paris, France.	A body to bogie connection for rail vehicles.
155841	16-7-1981	Daniel Ferziger, 4515 Greystone Avenue, Riverdale, New York, 10471, USA.	A flame retardant coated fabric suitable for use in the manufacture of drapable fabric articles and a method for making same.
154437	8-7-1981	Davy Mekee Ag., Borsigalle 1, 6000 Frankfurt (Main) 60, West Germany.	An improved process for the production of high tenacity technical grade yarns of polyamide and polyester.
154897	8-7-1981	Do.	Process and apparatus for the production of high tenacity technical grade yarn from a polymer by spin-drawing.
149669	25-1-1979	Demag Ag., Wolfgang-Reuter-Platz, D-4100 Duisberg 1, West Germany.	Tensioning device for tension element on metallurgical containers, especially on interchangeable converters.
157082	16-11-1982	Detmar Grunfeld Am Brunnen 24, D-4980 Bunde 1, West Germany.	A process for the production of bicycle frames and forks as well as to the bicycle frames and bicycle forks produced by this process.
147697	5-1-1979	Dunlop India Ltd., Dunlop House, 57 B, Mirza Galib Street, Calcutta-16.	Animal drawn vehicle.
147698	5-1-1979	Do.	Animal drawn vehicle.
147699	5-1-1979	Do.	Animal drawn vehicle.
147700	5-1-1979	Do.	Animal drawn vehicle.
150506	27-3-1980	Do.	An apparatus for folding of tyre tubes.
150295	30-11-1979	Eastern Carbons, Sneh Milan, Telephone Exchange Road, Dhanbad-826001, Bihar, India.	Improved beehive coke oven.
150303	30-11-1979	Do.	A battery of improved beehive coke ovens.
158494	7-4-1982	Do.	Equipment for continuous devolatilisation of coal.
154490	18-2-1982	Eaton Corporation, 100 Erieview Plaza, Cleveland, Ohio 44114, USA.	Precision forging method.
156438	20-4-1982	Do.	Shifting actuator.
157955	27-7-1982	Do.	A synchronizer clutch.
154459	3-9-1981	Edgar Malcolm Stubbersfield and Beryl Grace, Stubbersfield, Jubilee Street, Gatton, Queensland 4343, Australia.	Notching tool.
150431	22-8-1978	Edward Koppelman, 4424 Bergamo drive Encino, California 913316, USA.	Apparatus and method for thermal treatment of organic carbonaceous material.
154948	6-2-1982	Do.	Self-Cleaning screw conveyor.
153176	17-11-1981	EIMCO (Great Britain) Limited, Earlsway, Team Valley, Gateshead NE11 0SB, England.	A coupling system.
157921	1.3.1982	Energy Conversion Devices, 1675 West Mipple Road, Troy, Michigan 48084, USA.	An improved isolation valve for isolating interior of a chamber.
158451	22.4.1983	-Do-	A method of making multicomponent compositionally disordered material for reversibly storing hydrogen.

1	2	3	4
149307	12-4-1978	Esmil B.V., Stations Straat, 48 amersfoort, The Netherlands.	Heat Exchanger.
150745	19-2-1979	Do.	Apparatus for performing physical and/or chemical processes involving at least one liquid E.C. A heat exchanger.
156966	19-2-1983	Esmond Fonseca, Randhi Venkata Ramesh and Fredrick Etto, 11, Hungerford Street, Calcutta- 700 017, West Bengal, India.	Clamp means suitable for use in removable mounting/jointing of sections.
150860	20-3-1979	Eugene Walter Sivachenko, 6471, Riverside drive, Redding, California, U.S.A.	A long span bridge.
151232	16-12-1978	Do.	A bridge for suspension between spaced apart bridge supports.
157460	26-7-1982	Firmacarlatill, GmbH & Co. Kg. 4350 Recklinghausen, Postfach-101851, F.R.G.	Coke oven door.
159556	2-7-1983	Do.	Improvements in and relating to a coke oven door.
156250	18-10-1932	Fisher Controls International Inc., 7711 Bonhome, Clayton, Missouri-63105, U.S.A.	Pneumatic controller for controlling a process variable.
157430	14-10-1982	Do.	Dynamic fluid pressure sensor for a vortex-shedding flowmeter.
151643	26-11-1979	Fletcher Sutcliffe Wild Ltd., Universal Works, Harbury, Wakefield, West Yorkshire, WF4 5HR, England.	Mine roof supports
151893	27-11-1979	Do.	A reciprocable piston hydraulic pump.
154679	27-2-1981	Formica Corporation, Barden Avenue, Wayne, New Jersey, U.S.A.	High pressure decorative laminates containing an air-laid web and method of producing same.
157901	22-12-1981	Do.	A method of producing a heat and pressure consolidated decorative laminate.
153696	31-1-1981	Francois Toure Chateau de Logne, 57310, Guenange, France.	Heat exchanger for cooling the wall and the refractory of a blast furnace.
156109	6-5-1982	Do.	Improvements to hot-blast nozzles particularly for blast furnace.
156561	17-11-1982	Frank Thomas Beane, Route 7, Box 2200, Concord, North Carolina-28025, U.S.A.	Filter apparatus and fabric filter bag.
157307	23-10-1982	Mrs. Frances Hedrich Johnson, 1235, West Henderson Street, Salisbury, North Carolina, U.S.A.	An improved internal collection type air filter bag for filtering particulate material.
145401	17-3-1977	G.D. Societa Per Azioni, Via Pomponia, 10 Bologna, Italy.	Device to check and discard lengths of wrapping material (foil) in very high speed packet cigarette packers.
145490	17-3-1977	Do.	Device for putting the inner foil wrapper with the lengths ends over one of the larger faces of the bundle of cigarettes in a very high speed soft pack cigarette packer.
146011	8-3-1977	Do.	Improved device for folding the head portions of inner wrappers in a machine for packeting cigarettes into hinged-lid type packets.
146204	2-2-1976	Gebruder Ahle 5251 Karlstahl, West Germany.	A round wire helical compression spring particularly for use in motor vehicles.
156902	16-8-1982	Georg Fisher AG, CH-8201 Schaffhausen, Switzerland.	Permanent casting mold.

1	2	3	4
155806	27-9-1979	General Motors Corporation, 3044, West Grand Boulevard, Detroit, Michigan, U.S.A.	A rigid self supporting gas permeable low temperature bonded sand particle mold.
155807	27-9-1979	Do.	A method and apparatus of casting metal in a rigid, self-supporting gas permeable low temperature bonded sand grain mold.
158337	12-5-1982	Gareth Dietloff John Whitehead and Thomas Henry Gardener of Crqveston, 131 Cowick Lane, Exter, Devon, U.K. and 8 Haven Road, Exeter Devon, U.K. respectively.	An improved bedding material for poultry or other animals.
141086	5-6-1975	Graphite India Ltd., Durgapur-11, West Bengal, India.	A process for making carbon embedded fire clay and other allied refractory materials.
146691	20-1-1977	Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd., Birlagram, Nagda-456331, M.P. India.	Improved method and system for the recovery of chemicals and heat from alkaline pulping liquors.
152190	9-11-1979	Halifax Tool Co. Ltd., Southowram, Halifax, West Yorkshire HX3 9TW, England.	A fluid-powered free piston down the hole hammer drill.
152191	9-11-1979	Do.	Sealing of telescopically related elements.
145631	24-11-1976	Harry Manuel Haytayan, Sunnyside Lane, Lincoln, Massachusetts, U.S.A.	Nail support strip and nail assemblies embodying same.
156092	13-11-1981	Hitachi Ltd., 5-1, Marunoushi, 1-Chome, Chiyoda-Ku, Tokyo, Japan.	A device for operating a water-turbine or a pump water-turbine.
156788	22-10-1982	Do.	Rotary shaft water seal device in hydraulic machine.
157157	30-10-1982	Do.	Method of producing elongated large size forged article.
158192	23-2-1983	Do.	Rotary type pumping machine.
151023	13-11-1978	Hollands Signal apparaten B.V., Suidelijke Havenweg 40, P.O. Box, 42, 7550 GD Hengelo, The Netherlands.	Method for the manufacture of twistless or substantially twistless yarn and yarn whenever manufactured by the application of this method.
153713	24-11-1979	Do.	Method for producing textile fabrics from yarns and the fabric obtained by applying this method.
144180	7-1-1975	Hollingsworth GmbH, 7265 Neubulach 5, West Germany.	Beater roll for open-end spinning machines.
153118	24-9-1979	Do.	An opening roller for open-end spinning machines.
153187	28-9-1979	Do.	Garding plate.
153188	28-9-1979	Do.	A dirt separator for cards having a cylinder and fixedly mounted carding segments co-operating therewith.
155918	21-4-1981	Do.	Dirt separator with a web carding plate.
155937	29-5-1981	Do.	Improved carding machine.
156000	1-4-1981	Do.	An opening unit for open-end spinning machines.
157606	2-8-1982	Do.	Carding machine.
153940	15-9-1980	Hosang D.P. Pavri, 17, Camac Street, Calcutta-17.	An apparatus for printing.
150689	28-2-1979	ICI Australia Ltd., 1, Nicholson Street, Melbourne, Victoria, Australia.	A fuse device.
156067	10-9-1979	ICI Plc. Imperial Chemical House, Millbank, London SW1P, 3JF, England.	Containers for liquid to be electrostatically sprayed.

1	2	3	4
152727	12-11-1979	Imperial Clevite Inc., One Plymouth Meeting, Pennsylvania-19462, U.S.A.	Method for hose production and product.
141856	21-10-1975	Indian Explosives Ltd., 34, Chowringhee, Calcutta 16, West Bengal, India.	Rigid waterproof container for slurried explosives in small diameters.
147487	29-6-1978	Do.	A self-sealing pack and a method of making the same.
147782	5-8-1978	Do.	A cartridge spacer assembly.
153930	2-5-1980	Prof Dr. Ing. Karl Bammert, Alleestrasse 3, 3000 Hanover, West Germany.	Rotary machines.
156865	1-12-1982	Dr. Ing. Gunter Aliland Amselweg 3, D-5750 Menden 2 West Germany.	An elongated outline nozzle for tundishes in continuous casting units.
152965	16-3-1979	Instytut Obrobki Plastycznej, ul. Zamienhofa 2/4, Poznan, Poland.	Method and apparatus for forging crank throws
154651	31-5-1980	Do.	Forging device.
152528	7-8-1980	Irapa Vyrbovy A, Racionalizacni Ustav Rrumyslu No. 1, Pristavni, Praha 7, Czechoslovakia.	A method for the manufacture of fibrous latrom material for the manufacture of batter separators.
156768	15-10-1982	Jack B. mow, Hüslerstrasse 71, CH-5400 Baden, Switzerland.	Spring element for absorption of a force acting opposite or at an angle to the former free.
157130	24-7-1982	Jean J. Beaumont Levratte 18, 1260 Nyon, Switzerland.	Tridimensional metal meswork as reinforcement for building panels.
157156	8-10-1982	J.F. Riera 3689 Sandburg, Troy MI 48084, B.J. Bielawski, Sr. 8065, Robin wood, Detroit MI 48234, USA.	A cut off machine for severing elongated material.
151641	6-8-1979	J.J. Bollmann Fluhgasse 49, CH-8008 Zurich, Switzerland.	System for anchoring structural members
155463	12-11-1981	J.M. Manufacturing Co. Inc., 1051 Sperry Road, Stockton, California 95206, USA.	An elongated strip of plastics material for forming a tube and a tube made thereby.
146976	2-7-1977	John Stewart Lawson Baker, Kings House, Tillington, Petworth, Sussex, England.	Apparatus for electrostatic spraying of pesticides.
151834	24-3-1979	Kenneth James Reed, 33, Carlysk Square, London, S.W. 3., England.	A process for preparing a dry release transfer sheet.
143971	18-10-1976	Kirloskar Oil Engines Ltd., Laxmanrao Kirloskar Road, Khadki, Pune-411 003, Maharashtra, India.	Improvements in crankcase of an internal combustion engine.
155494	11-10-1976	Do.	A pre-combustion chamber for an internal combustion engine.
150454	21-2-1980	Do.	An improved inlet manifold for use in a compression ignition internal combustion engine operating on Bi-fuel.
157986	19-7-1983	Kitamura Machinery Co. Ltd., 1870 Toide-Komyoji, Takaoka-Shi, Toyama-Ku, Japan.	Automatic tool changing apparatus.
155081	29-8-1981	Korf Engineering GmbH, Neusserstrasse 111, 4000 Dusseldorf 1, West Germany.	Process and apparatus for directly making liquid pig-iron from coarse iron ore.
157687	29-8-1981	Do.	Apparatus for directly making liquid pig iron from coarse iron ore.
150591	22-11-1978	Kubota Ltd., No. 1-2-47 Shikizu-Higashi, Namiwaku, Osaka, Japan.	Flexible plastic pipe joint.
151566	27-9-1979	Do.	Method of forming a socket end on a plastic pipe and a molding device for use of the method.

RENEWAL FEES PAID

142888	143262	143418	144541	144620	144958	145068
145137	145501	146229	146292	146305	146324	146424
146956	147167	147178	147294	147294	147295	147330
147431	147475	147529	147587	147710	147840	148137
148213	148409	148488	148620	148921	149268	149554
149565	149817	150081	150249	150381	150621	150636
150662	151032	151051	151052	151273	151351	151750
151877	151889	152037	152089	152094	152097	152200
152211	152456	152468	152558	152741	152893	152910
152952	153075	153247	153601	153651	153834	153888
153929	153992	154095	154207	154210	154420	154584
154586	154589	154621	154625	154663	154650	154821
154822	154995	155073	155099	155103	155229	155249
155329	155348	155396	155407	155429	155436	155502
155554	155582	155631	155871	156013	156017	156046
156108	156377	156434	156445	156478	156484	156826
156855	156920	156943	157025	157027	157101	157131
157133	157134	157135	157137	151177	151180	151274
157420	157454	157459	157471	157764	157860	157900
157976	158078	158186	158194	158265	158296	158323
158408	158455	158494	158509	158618	158662	158725
158740	158749	158761	158768	158784	158785	158786
158790	158852	158945	159121	159149	159269	159291
159486	159510	159600	159603	159642	159661	159709
159711	159791	159845	16034	160223	160229	160245
160246	160309	160310	160314	160315	160347	160350
160412	160415	160430	160482	160497	160595	160599
160612	160645	160801	160900	160912	160963	160991
160992	161003	161115	161178	161238	161467	161520
161695	161715	161861	161907	161935	161952	161984
161985	162002	162932	162050	162059	162111	162169
162173	162174	162190	162262	162272	162273	162278
162280	162302	162330	162331	162334	162403	162409
162435	162560	162653	162708	162726	162746	162756
162760	162784	162803	162804	162811	162815	162863
162889	162969	163033	163034	163076	163095	

RESTORATION PROCEEDINGS

Notice is hereby given that an application for restoration of Patent No. 141906 dated the 18th Oct. 1976 made by Tracter Tirfor India Private Limited on the 24th June 1988 and notified in the Gazette of India, Part III, Section 2 dated the 3-12-88 has been allowed and the said Patent restored.

Notice is hereby given that an application for restoration of Patent No. 158498 dated the 22nd Sept. 1982 made by Permelec Electrode Ltd. on the 21-6-88 and notified in the Gazette of India, Part III, Section 2 dated the 3-12-88 has been allowed and the said patent restored.

Notice is hereby given that an application for restoration of Patent No. 149277 dated the 9th July 1979 made by Ahmedabad Manufacturing and Calico Printing Company Limited on the 6th June '88 and notified in the Gazette of India, Part III, Section 2 dated the 3rd Dec. 1988 has been allowed and the said patent restored.

Notice is hereby given that an application for restoration of Patent No. 149369 dated the 9th July 1979 made by Ahmedabad Manufacturing and Calico Printing Limited on the 6-6-88 and notified in the Gazette of India, Part III, Section 2 dated the 3-12-88 has been allowed and the said patent restored.

Notice is hereby given that an application for restoration of Patent No. 148937 dated the 9-7-79 made by Ahmedabad Manufacturing and Calico Printing Company Ltd. on the

6th June 1988 and notified in the Gazette of India, Part III, Section 2 dated 3-12-88 has been allowed and the said Patent restored.

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Re. 2/- (Postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

CLASS : 32-D.

164681

Int. Cl. : C 07 f 15/00.

A METHOD FOR THE PREPARATION OF A β -DIKETONATE COMPLEX OF CERIU (IV) OR CERIU (III) AND AN ALKALI METAL WITH 6, 6, 7, 8, 8-HEP-TAFLUORO-2, 2-DIMETHYL-3, 5-OCTANE-DIONE.

Applicant : CORNING GLASS WORKS, OF CORNING, NEW YORK, N. Y. 14831, U.S.A.

Inventor : DAVID ALLEN THOMPSON.

Application No. 1129/Cal/83 filed September 15, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

6 Claims

A method for the preparation of a β -diketonate complex of general formula :

A (fod)₄

where A represents Ce⁴⁺ or M Ce⁴⁺ + (where M represents Na, Li, K, Cs, or Rb) and fod represents 6, 6, 7, 7, 8, 8-heptafluoro-2, 2-dimethyl-3, 5-octanedionate,

which comprises the steps of

(a) adding a liquid reaction mixture comprising a dissolved Ce⁴⁺ salt or a dissolved H fod β -diketonate and dissolved Ce⁴⁺ + salt to at least one compound which contains (fod)⁴⁻ + anions or is capable or pro-

viding (fod) anions by deprotonating the dissolved β -diketonate complex of Ce^{4+} ; and

- (b) separating and recovering the A (fod)₂ complex from the liquid reaction mixture by conventional procedures.

Compl. specn. 14 pages.

Drgs. 2 sheets

CLASS : 9-D.

164682

Int. Cl. : C 22c 39/44, 39/30, 39/20, 39/26, 39/08, 39/50, 39/54.

REINFORCING STEEL FOR CONCRETE HOT-ROLLED AND THERMICALLY STRENGTHENED.

Applicant : VEB STAHL-UND WALZWERK "WILHELM FLORIN 1422 HENNIGSDORF, VELTENER STRASSE, GERMAN DEMOCRATIC REPUBLIC.

Inventors : (1) DIPL. ING. KURT WELFLE, (2) HEINZ WINTERSTEIN.

Application No. 137/Cal/85 filed February 23, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

2 Claims

A process for preparing improved hot rolled and thermally stabilized reinforcing steel rod for concrete having a minimum yield strength of 500 MPa in the dimensional range 6 to 32 mm nominal diameter and universal weldability which comprises :

- (i) alloying elements selected from silicon in weight ratio 0.17 to 0.50% by weight of steel and manganese in amounts of 0.55% to 1.10% by weight of steel, optionally with one or more alloy elements, which come from the charged scrap with varying values of chromium not exceeding 0.50% by weight of steel, copper not exceeding 0.40% by weight of steel, molybdenum not exceeding 0.20% by weight of steel and nickel not exceeding 0.50% of steel;

- (ii) forming the required reinforcing steel rod by conventional hot rolled technique from said alloy of step (i) and wherein the alloying equivalent $L\hat{A}$ being determined by the following equation :

$$L\hat{A} = Mn + 0.7(\% Si + \% Cr + \% Cu) + 2\% Mo + 0.4\% Ni$$

whereby preferably $1.25 \leq L\hat{A} \leq 1.85$

Compl. specn. 11 pages.

Drg. Nil

CLASS : 145-B.

164683

Int. Cl. : D 21 j 1/00.

A METHOD FOR MAKING A FIBRE BOARD AND A BINDER COMPOSITION FOR USE IN THE METHOD.

Applicant : NOVA SCAND UTIVECKLING AKTIEBOLAG, OF (BOX 3018), BJORNSSONSGATAN 27, S-161 56 BROMMA, SWEDEN.

Inventors : (1) GEORG BJORHAAG, (2) GORAN EMBRING, (3) KARL-GUNNAR STAHL.

Application No. 215/Cal/85 filed March 22, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A method for making a fibre board having high strength as well as high water and flame resistance, characterized in that a lignin-containing fibre material is mixed with a binder composition comprising :

- (a) 50—90 parts by weight of an alkali silicate solution;
- (b) 0.5—10 parts by weight of sulphur and/or an inorganic sulphur compound, and

- (c) 10—40 parts by weight of a calcium and/or magnesium compound;

and, optionally, further additives, such as fillers and/or hydrophobing agents, and is compressed under pressure at a temperature of 130—230 °C.

Compl. specn. 13 pages.

Drg. 1 sheet

CLASS :

164684

Int. Cl. : B 01 f 5/00.

TOWER PACKING ELEMENTS.

Applicant : NORTON COMPANY, OF 1 NEW BOND STREET, WORCESTER, STATE OF MASSACHUSETTS, U.S.A.

Inventor : MIN ALEXANDER HSIA.

Application No. 273/Cal/85 filed April 10, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

20 Claims

A packing element for fluid-fluid contact apparatus comprising :

- a first hollow triangular shape structure on one side of the packing element and a central plane thereof extending perpendicular to a central axis of the packing element having three relatively thin narrow elongated inclined structural side members inclined relative to each other and the central plane, extending around the central axis and between apexes of the first triangular structure;

- a second hollow triangular shape structure on an opposite side of the packing element and the central plane and angularly displaced about the central axis relative to the first triangular structure and having three relatively thin narrow elongated inclined structural side members inclined relative to each other, the central plane and the inclined side members of the first triangular structure and extending around the central axis between apexes thereof and crossing the inclined side members of the first triangular structure; and

- a pair of interconnected generally Y-shape structures each situated on one side of the central plane and the packing element, adjacent each of the first and second triangular structures and each including a central hub connected to each other about the central axis, and

- three relatively thin narrow elongated radial structural member a angularly displaced relative to each other about the central axis, extending radially from the central hub, connected to and crossing outer inclined edges of the three structural side members of each adjacent one of the first and second triangular structures to free drip ends thereof each situated within an open ended cell adjacent each of the apexes.

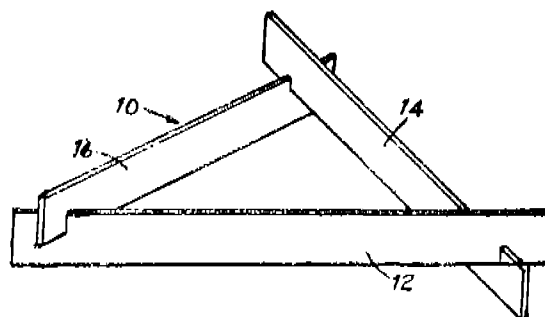


Fig. 4

Compl. specn. 26 pages.

Drgs. 3 sheets

Int. Cl. : F 03 b 17/00; F 03 c 1/00.

164685

AUTOMATIC HYDRAULIC ENGINE.

Applicant & Inventor : SRI SUSANTA KUMAR BHUIYA,
OF 93, SALKIA SCHOOL ROAD, SALKIA, HOWRAH-
711 106, INDIA.

Application No. 309/Cal/85 filed April 23, 1985.

Complete Specification left on 16th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4,
Patents Rules, 1972), Patent Office, Calcutta.

6 Claims

An automatic hydraulic engine comprising :

- (a) a start on & off unit;
- (b) an accelerating unit;
- (c) at least one load carrying unit; and
- (d) one force transmission unit, the last unit interconnects the first three units, wherein the start on & off unit consists of the oil container (187), the check valve (107), the pump (89), the check valve (70), the driving cylinder (1), the start & off device (25), the driven cylinder (2), the check valve (35) Valve (pressure release valve), back to the same oil container (187), all are connected with one after another serially (as directed) by means of bolts in 0—180° and the said accelerating unit consists of—the oil container (187), the check valve (108), the pump (90), the check valve (72), the driving cylinder (3), the accelerating device (26), the driven cylinder (4), the check (36) valve (pressure release valve), back to the same oil container (187), all are connected one after another serially (as directed) by means of bolts in 0—180°, and the said load carrying unit consists of—the oil container (187), the check

valve (109), the pump (91), the check valve (73), the driving cylinder (5), the driven cylinder (6), the check (37) valve (pressure release valve), back to the same oil container (187), all are connected one after another serially (as directed by means of bolts in 0—180°, and the said force transmission unit consists of—the crank shaft (199), crank (170), shafts (137, 138, 139 etc), pinions (181, 182, 183, 184, 185, 186, etc), levers (27, 28, 29, 167 etc.), cams (190, 191, 192, 125, 126, 127, 134 etc.), all are connected with one to another device serially (as required, shown in the accompanying drawings) by means of bolts, keys in 0—180°, as devined herein hydraulic engine will work by keeping in 'on' position the start & off device (25) manually and by rotating the crank shaft (199) once for creating slight pressure (as Per requirement of the engine) initially through force transmission unit (134, 138, etc.) or creating slight pressure once directly on the piston of the driving (1) cylinder of the start on & off unit and will produce multiple force on the piston the driven (2) cylinder of the start on & off unit, now the force will produce further multiple force on the piston of the driven (4) cylinder of the accelerating unit through accelerating device (26), this force will reproduce multiple force on the piston of the driven (6) cylinder of the load carrying unit or above, this optimum force will function to rotate the crank shaft (199), a principal part of the optimum force (horse power) of the rotating crank shaft (199) will function to move or rotate or pull and push or work the object, and the rest part of the optimum force (horse power) of the rotating crank shaft (199) will be returned through force transmission unit (134, 138, etc.) on the driving (1) cylinder of the start on & off unit and pumps (89, 90, 91, etc.) and pressure release valves (35, 36, 37, etc.) for maintaining repeated cycle of work to keep running the engine continuously and automatically until it is stopped by the operator by keeping in 'off' position the start & off device of the start on and off unit.

Compl. specn. 39.

Drgs. 28 sheets

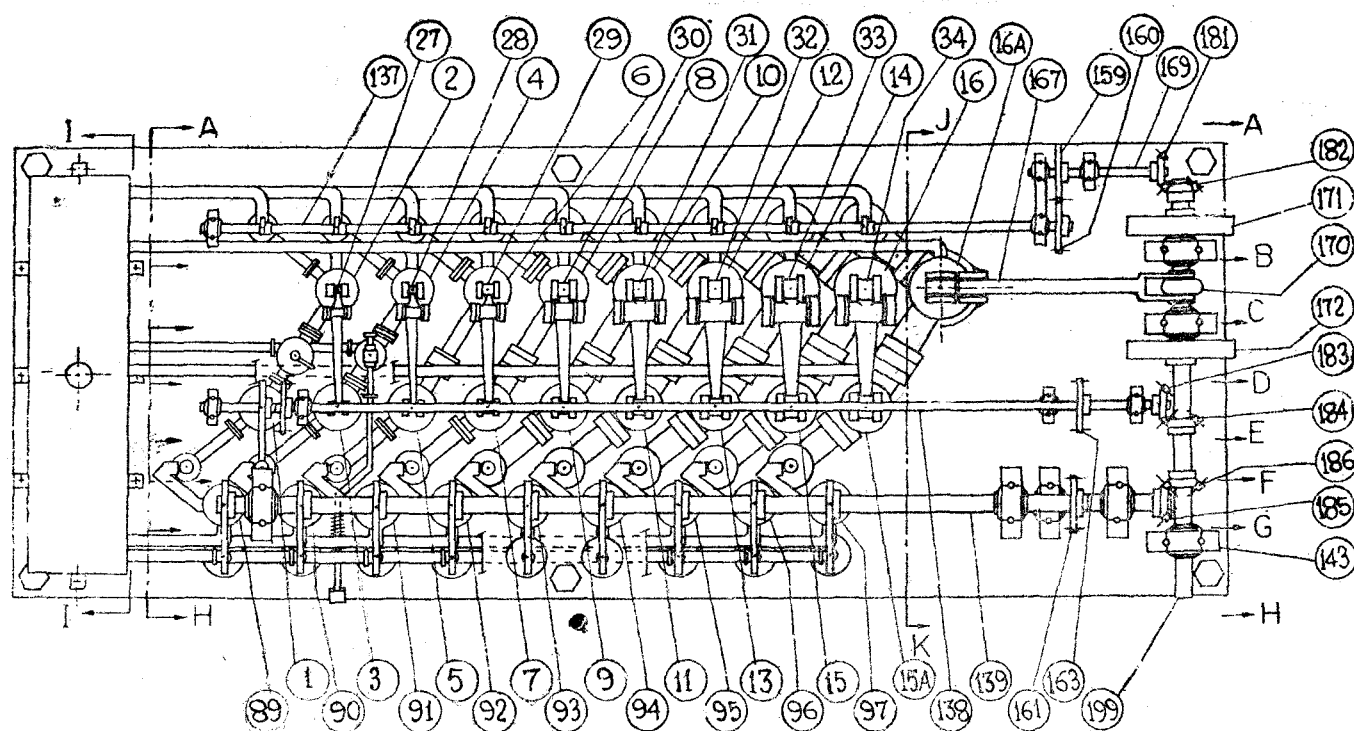


Fig. 1B

CLASS : 32-E; 40-0.

164686

Inventors : (1) HORST SULZBACHER, (2) WERNER KEPPLINGER, (3) ERICH OTTENSCHLAGER.

Int. Cl. : C 01 b 33/00, C 07 f 7/00.

A PROCESS FOR THE PRODUCTION OF FILERS.

Applicant : DEGUSSA AKTIENGESELLSCHAFT, OF 6000 FRANKFURT AM MAIN, WEISSFRAUENSTRASSE 9, FEDERAL REPUBLIC OF GERMANY.

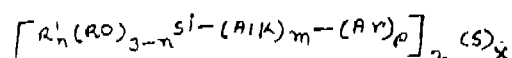
Inventors : (1) DIETER KERNER, (2) PETER KLEIN-SCHMITT, (3) ALAN PARKHOUSE, (4) SIEGFRIED WOLFF.

Application No. 524/Cal/85 filed July 16, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

2 Claims

A process for the production of synthetic silicate fillers, modified on the surface with at least one organo-silicon compound, characterized in that the compound is water-insoluble and corresponds to the formula (I) of the accompanying drawings :



Formula I

wherein R and R¹ each represent an alkyl group having from 1 to 4 carbon atoms or a phenyl radical, all radicals R and R¹ being in each case the same or different, R represents a C₁—C₄ -alkyl-C₁—C₄ -alkoxy group, n represents 0, 1 or 2, alk represents a bivalent, straight or branched hydrocarbon radical having from 1 to 6 carbon atoms, m represents 0 or 1, Ar represents an arylene radical having from 6 to 12 carbon atoms, p represents 0 or 1, with the proviso that p and m do not simultaneously represent 0; and x represents a number from 2 to 8; wherein;

- up to 80% by weight of at least one organosilicon compound according to the formula (I) is emulsified in water, optionally in the presence of a surface-active material;
- this emulsion is mixed with stirring with an aqueous suspension of a silicate, synthetic filler, at a temperature of from 10 to 50°C, so that from 0.3 to 15% by weight of the organosilicon compound(s) according to formula (I), based on the filler, are obtained in the suspension;
- the mixture is optionally heated to a temperature of from 50 to 100°C; and
- after from 10 to 120 mins., the filler is filtered off and dried at from 100 to 150°C or the suspension is spray-dried.

Compl. specn. 15 pages.

Drg. 1 sheet

CLASS : 130-D & F.

164687

Int. Cl. : C 22 b 5/00, 15/00.

A SMELTING PROCESS FOR PRODUCING METALS FROM ORES.

Applicant : VOEST-ALPINE AKTIENGESELLSCHAFT, OF A-4020 LINZ, MULDENSTRASSE 5, AUSTRIA.

Application No. 532/Cal/85 filed July 18, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

13 Claims

A smelting process of producing metal from ore containing heavy metal non-ferrous metal sulfides, comprising :

reacting the ore in particle form with an oxygen-containing gas in a first reaction vessel in a manner to produce heat and to oxidize the ore to form sulfur dioxide and molten droplets containing metal sulfides and metal oxides;

passing the molten droplets and sulfur dioxide downwardly into a second reaction vessel having an upper end and containing a fluidized bed of coal particles, having an upper surface, in a manner to impinge the molten droplets directly onto said upper surface;

supplying coal particles and an oxygen-containing gas to the second reaction vessel under conditions to fluidize the coal particles and to react the particles and the gas to produce reducing gases and smelting heat, the molten droplets passing downwardly through fluidized bed and thereby being reduced so as to form molten metal products, withdrawing reducing gases from near the upper end of the second reaction vessel and withdrawing molten metal from the second reaction vessel at a location below the fluidized bed.

Compl. specn. 32 pages.

Drgs. 3 sheets

CLASS : 146-D₁.

164688

Int. Cl. : G 01 m 11/64.

MULTI-DEGREE OF FREEDOM MOUNT.

Applicant : GRUMMAN AEROSPACE CORPORATION, AT BETHPAGE, NEW YORK.

Inventor : SUEY JUE.

Application No. 744/Cal/85 filed October 17, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

9 Claims

An optical mount having rotational and translational freedom, said mount comprising :

- first (12) and second (11) semi-spherical support means adapted for rotational movement therebetween, said first support defining a z rotational axis and a pivot point, said first support also defining a threaded opening which surrounds said rotational axis and said pivot point;
- a first carrier (13) having an exterior thread which engages said threaded opening and translates said carrier along said z rotational axis in response to rotation of the first semi-spherical support means (12), said first carrier (13) defining an optical opening therein;
- a second carrier (14) mounted within said first carrier (13), said second carrier (14) defining a support within said optical opening for an optical means;

- (d) adjustable means for pivoting said first carrier about said pivot point.

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURG, PENNSYLVANIA 15222, U.S.A.

Inventor : KENETH ROBERT PELOWSKI.

Application No. 852/Cul/85 filed December 02, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

A programmable controller type circuit breaker apparatus for completing a circuit between an electrical load and an AC or DC load power source of any polarity, comprising :

controller means for providing an electrical output signal when said circuit is to be completed;

full wave rectifier bridge means having input terminals and output terminals, said output terminals being connected to a circuit combination of said electrical load and said load power source; and characterized by

electronic switch means having output terminals which are connected to said input terminals of said full wave rectifier bridge means, said electronic switch means also having a control terminal which is connected with said controller means for receiving and being actuated by said electrical output signal from said controller means for completing the circuit between such load means and the load power source for energizing said load means regardless of whether said load power source is AC or DC and regardless of the polarity of said load power source if it is DC.

Compl. specn. 25 pages.

Drgs. 4 sheets

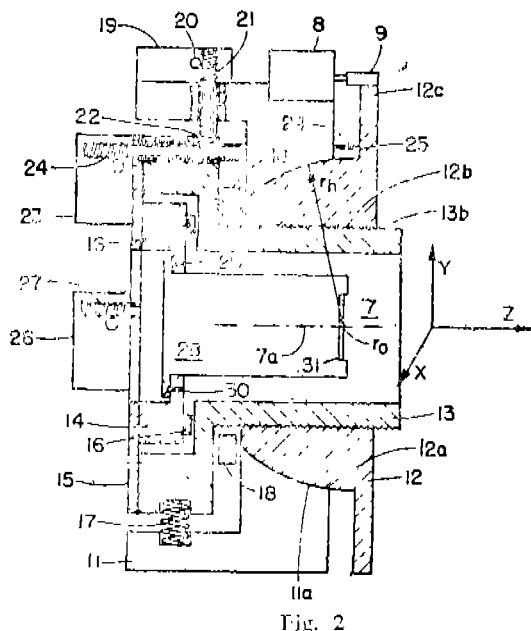


Fig. 2

Compl. specn. 16 pages.

Drgs. 2 sheets

CLASS : 69-A.

164689

Int. Cl. : H 01 b 73/00.

PROGRAMMABLE CONTROLLER TYPE CIRCUIT BREAKER APPARATUS.

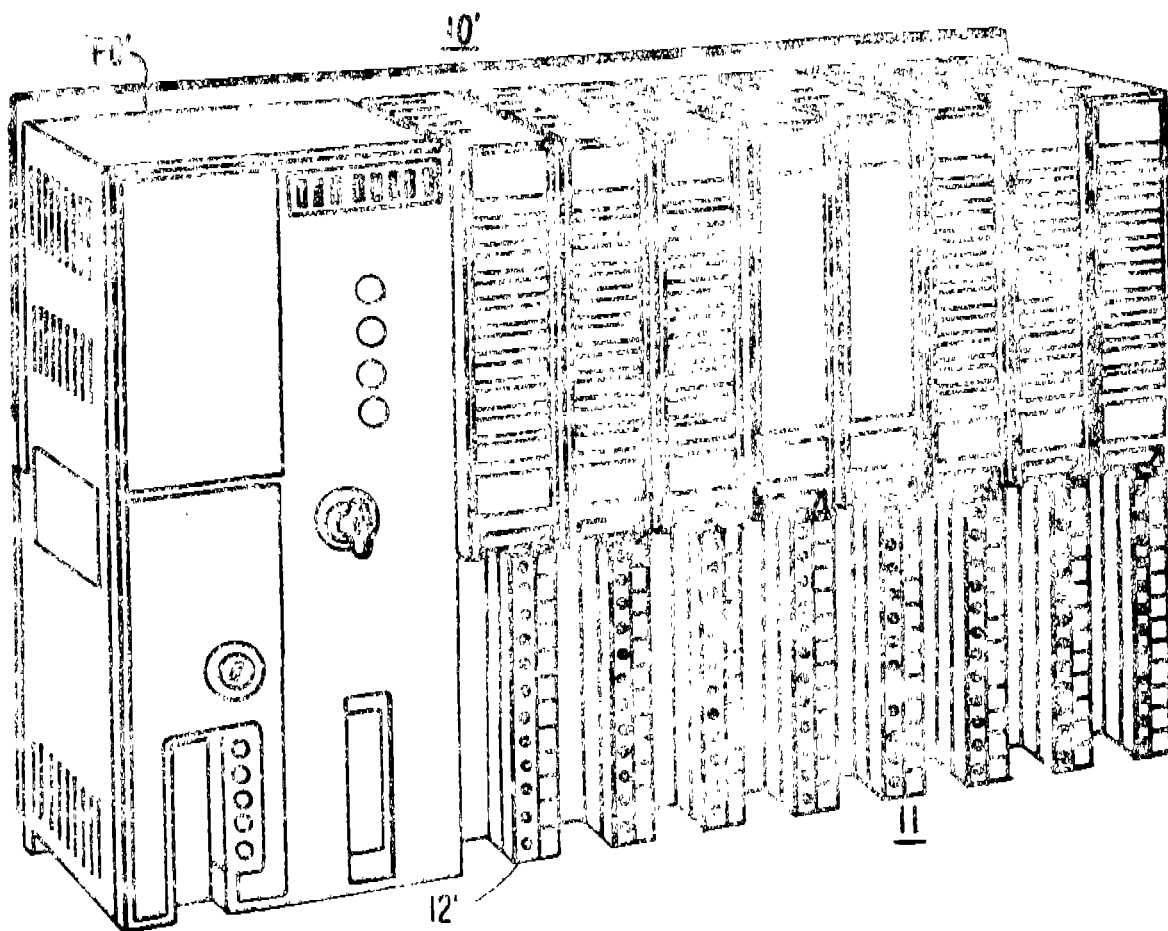


Fig. 1

CLASS 108-C₁ & 85-J.

164690

Application No. 924/Cal/85 filed December 23, 1985.

Int. Cl. : C 21c 1/10; F 27 b 17/00.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

WALL MEMBER FOR CONVERTER CHAMBER.

Applicant : GEORG FISCHER AKTIENGESELLSCHAFT, OF CH-8201 SCHAFFHAUSEN, SWITZERLAND.

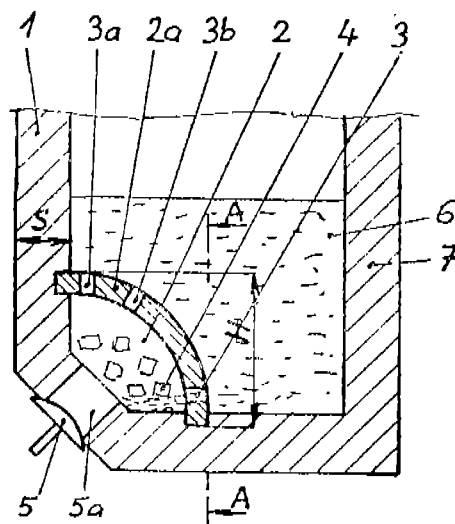
Inventors : (1) FEHR KURT, (2) HENYCH IVÖ, (3) PAVLOVSKY RUDOLF.

Application No. 910/Cal/85 filed December 18, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

A wall member forming a chamber in a converter vessel for the treatment of cast iron melt with magnesium, said wall member having a length L in millimeters and a height H in millimeters and declining a plurality of openings at different height levels from the converted bottom, wherein the improvement comprises that in relation to the quantity T in tons of the cast iron melt, the length L of the wall member is determined in accordance with the formula $L = 600 \times T^{0.45} \times A$ and the height H of the wall member is determined in accordance with the formula $H = 0.5 L / A$, wherein A is a coefficient ranging between 0.5 to 1.5 depending upon the sulfur content of the cast iron melt from 0.01 to 0.15% and depending upon the thickness S of the refractory lining of the converter vessel ranging from 40 to 150 mm.



Compl. spcn. 9 pages.

Drg. 1 sheet

CLASS : 122

164691

Int. Cl. : B 03 c 3/84.

CORONA AND COLLECTING ELECTRODES FOR ELECTROSTATIC PRECIPITATORS.

Applicant : METALLGESELLSCHAFT AKTIENGESELLSCHAFT, OF REUTERWEG 14, D-6000 FRANKFURT AM MAIN WEST GERMANY.

Inventors : 1. WILLI BATZA, 2. WERNER ROSCH.

7 Claims

An electrode assembly of corona-discharge electrodes and collecting electrodes for an electrostatic precipitator in which pyrophoric dusts are collected from gases at a temperature of 150 to 250°C, said corona-discharge electrodes comprising :

a centering frame of ordinary steel; and
band-shaped corona discharge electrodes tensioned in said frame and being composed of cut strips with sheet metal cores clad directly on opposite faces with a corrosion-resistant steel, the sheet metal cores having the same coefficient of thermal expansion as said frames, said corrosion-resistant steel being selected from the group which consists of :

- (A) titanium or niobium stabilized steel with 10 to 18% by weight chromium, up to 0.1% by weight carbon, up to 1.0% by weight silicon, up to 1% by weight manganese, the balance being iron and unavoidable impurities which do not effect the properties of the composition;
- (B) titanium or niobium stabilized steel with 16 to 20% by weight chromium, 7 to 12% by weight nickel, up to 0.1% per weight carbon, up to 1% by weight silicon, up to 2% by weight manganese, the balance being iron and unavoidable impurities, and;
- (C) a steel with 26 to 28% by weight chromium, 4 to 5% by weight nickel, 1.3 or 2% by weight molybdenum, up to 2% by weight manganese, up to 0.1% by weight carbon, the balance being iron and unavoidable impurities.

Compl. spcn. 11 pages

Drg. Nil

CLASS : 169-B₂

164692

Int. Cl. : F 41 g 3/00.

A COLLIMATOR GUN SIGHT.

Applicant & Inventor : VIJAY KUMAR PAUL, OF 24, MANDEVILLE GARDENS, FLAT NO. B/2/7, CALCUTTA-700019, WEST BENGAL, INDIA.

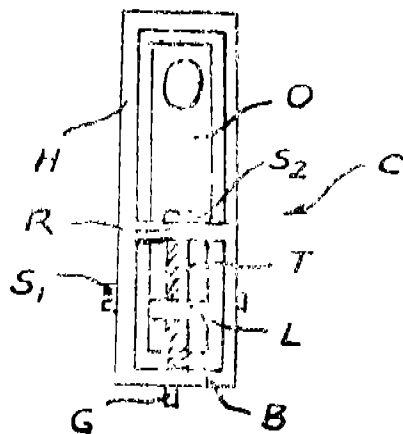
Application No. 133/Cal/86 filed February 20, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

A collimator gun sight comprising a housing, a table having an optical sighting device mounted thereon by means of adhesive moveably fitted within the said housing screws disposed in the said housing adapted to hold the said table within the housing such that by rotating the said screw the said table can be moved in the horizontal direction, another screw disposed in the said housing adapted to hold the said table such that by rotating the said screws the said table can be moved in the vertical direction, for adjusting

the said optical sighting device on a fire arm and for setting the aim of the fire arm on a target.



Compl. Specu. 13 pages

Drg. 1 sheet

CLASS : 169-B₂

164693

Int. Cl. : F 41 g 3/00.

A COLLIMATOR GUN SIGHT.

Applicant & Inventor : VIJAY KUMAR PAUL, OF 24, MANDEVILLE GARDENS, FLAT NO. B/2/7, CALCUTTA-70019, WEST BENGAL, INDIA.

Application No. 145/Cal/86 filed February 27, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

12 Claims

A collimator gun sight comprising :

a housing for a table having an optical sighting device mounted thereon by means of adhesive to be fitted within the said housing;

said table being fitted within the said housing by means of screws, one of the said screws adapted to hold the said table within the housing is disposed in the horizontal direction while the other screw adapted to hold the said table is disposed in the vertical direction such that upon effecting a movement of the said screws the said table can be moved either in the vertical direction or in the horizontal direction for setting the said optical sighting device on a fire arm;

the said vertically extending screw further provided with a range setting arrangement for setting the aim of the fire arm on a target;

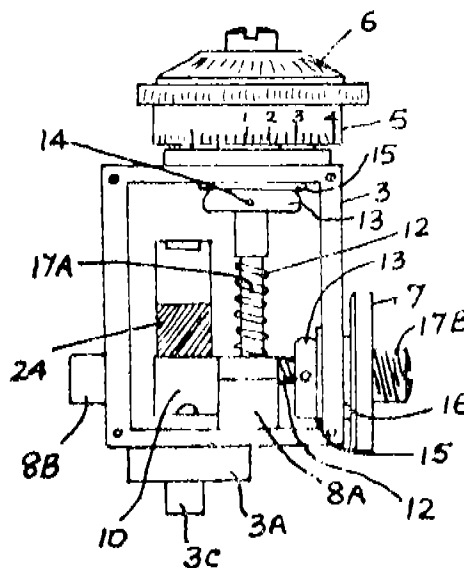
said range setting arrangement consists of a range drum fitted with the said vertically extending screw;

the said range drum is a circular drum marked with graduations on the external surface, the inside of the said range drum being provided with a plurality of teeth;

the said teeth adapted to engage with a lug provided on a disc member such that upon imparting a rotation of the said range drum a movement of the said vertical screw is effected to provide a movement of the said table and the optical sighting device mounted on the said table in the vertical direction for alignment of the said optical sighting device with a target;

the said disc member being threadedly held with the said vertically extending screw and additionally

secured by means of a pin; the said range drum being held to the said vertically extending screw at the upper end.



Compl. specn 22 pages.

Drg. 1 sheet

CLASS : 40-F & 201-D

164694

Int. Cl. : B 01 j 1/00; C 02 c 5/00.

DEVICE FOR THE ANAEROBIC PURIFICATION OF WASTE WATER.

Applicant : PAQUFS B.V., OF T. DE BOERSTRAAT 11, 8561 HJ BALK, THE NETHERLANDS.

Inventor : SJOERT HUBERTUS JOZEF VELLINGA.

Application No. 146/Cal/86 filed February 28, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

Device for the anaerobic purification of waste water comprising :

a reactor tank with a settler disposed above a fermentation chamber;

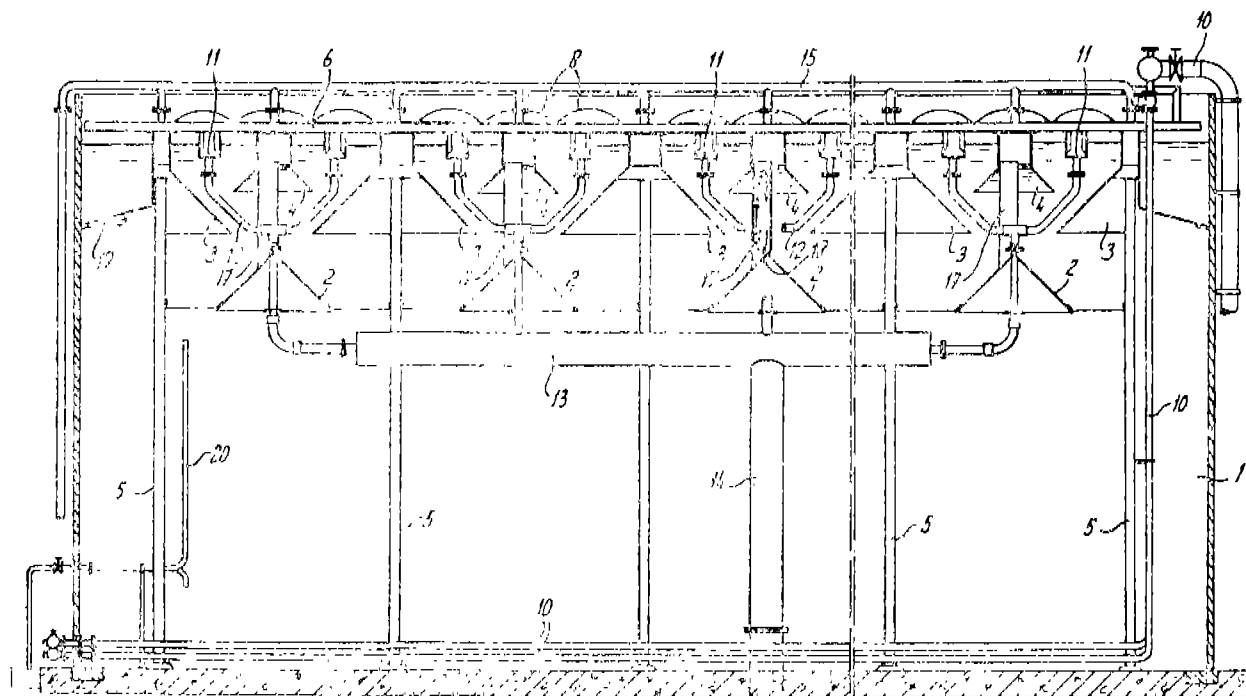
the settler being formed by at least two levels of gas-collection hoods which are sited in an overlapping manner such that the gas bubbles rising up out of the fermentation chamber are always collected;

means for the discharge of purified water disposed above the gas collection hoods, and means for the supply of waste water to the fermentation chamber;

characterized in that the settler consists of three levels of gas-collection hoods (2, 3, 4), each gas-collection hood of the uppermost level (4) being sited directly above a gas-collection hood of the lowermost level (2);

in that each gas-collection hood of the lowermost layer (2) is connected via one or more pipes to a gas-collection hood of the uppermost level (4); and

in that the gas-collection hoods of the uppermost and middle level (4 and 3 respectively) have a direct connection to the gas discharge line (15).



Compl. specn. 8 pages

Drg. 2 sheets

CLASS : 40-F

164695

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

Int. Cl. : B 07 b 4/00, 7/00, 9/00.

6 Claims

PROCESS OF CARRYING OUT HIGH-TEMPERATURE REACTIONS.

Applicant : METALLGESELLSCHAFT AKTIENGESELLSCHAFT, OF REUTERWEG 14, D-6000 FRANKFURT AM MAIN, WEST GERMANY.

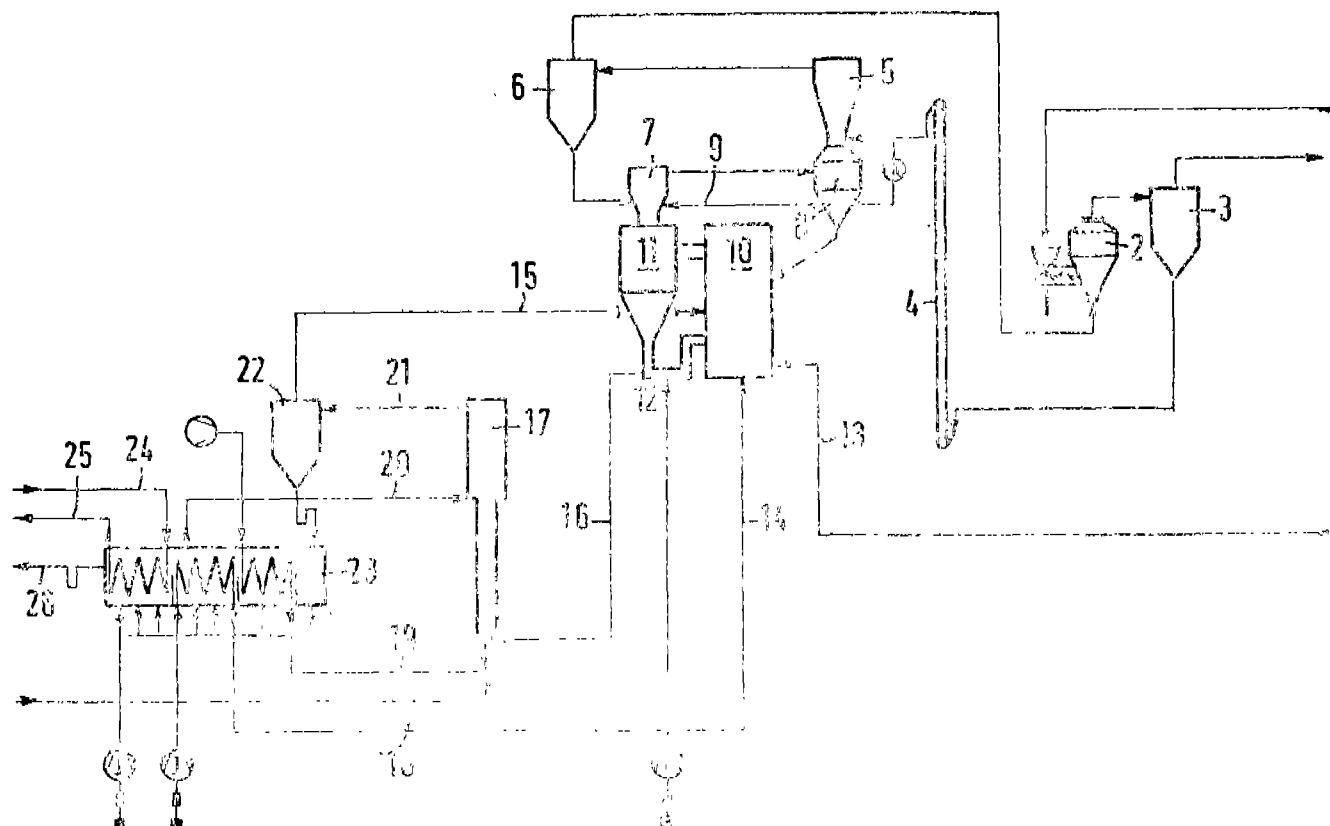
Inventors : (1) PAUL BROEDERMANN, (2) HARALD SAUER, (3) WERNER STOCKHAUSEN.

Application No. 157/Cal/86 filed March 03, 1986.

A process of carrying out high-temperature reactions between a hot gas and previously heated solids as herein stated which are heated at a high temperature, at which they are no longer free flowable in a substantially vertical conveyor passage, whereafter the gas-solids suspension is cooled suspension, characterized in that the preheated solids are supplied from below and in the direction of conveyance of the conveyor passage to and through a burner frame, said burner flame being disposed in the lower portion of the said conveyor passage (17), said preheated solids being made to flow throughout the length of a sufficiently long reaction zone in said conveyor passage, and when the desired reaction has been completed the gas

solids suspension still flowing in the same direction is thereafter contacted with a separately introduced coolant and

cooled to a temperature at which the solids are free flowable.



Compl. specn. 14 pages

Drg. 1 sheets

CLASS : 32-A₁.

164696

Int. Cl. : C 09 b 27/00, 31/00.

PROCESS FOR THE PREPARATION OF WATER-SOLUBLE MONAZO AND DISAZO COMPOUND.

Applicant : HOECHST AKTIENGESELLSCHAFT, D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

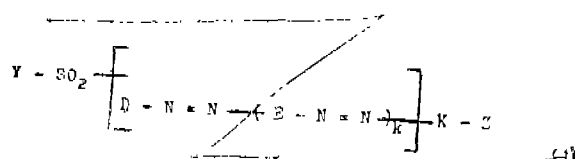
Inventors : (1) MARCOS SEGAL, (2) MICHAEL KUNZE.

Application No. 211/Cal/86 filed March 17, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

15 Claims

1. A process for preparing a water-soluble azo compound conforming to the general formula (1) of the accompanying drawings,



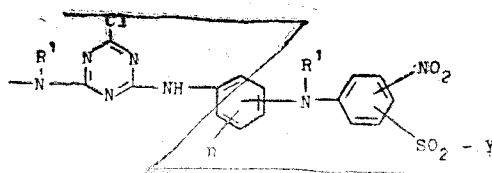
in which the symbols have the following meanings :

k is the number zero or 1;

the $-SO_2-Y$ group is mandatorily bonded to a carbon atom of an aromatic nucleus of D or of an aromatic-nucleus of E or of a benzene nucleus of a substituent on D;

D is the phenyl radical which may be substituted by 1, 2 or 3 substituents which belong to the group of substituents consisting of alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxyl, alkanoylamino of 2 to 5 carbon atoms which may be substituted, optionally substituted benzoylamino, phenylamino, sulfophenylamino, carbamoyl, carbamoyl which is monosubstituted or disubstituted by alkyl of 1 to 4 carbon atoms, sulfamoyl, sulfamoyl which is monosubstituted or disubstituted by alkyl of 1 to 4 carbon atoms, N-phenylsulfamoyl, N-phenyl-N-(C₁C₄-alkyl)-sulfamoyl, cyano, nitro chlorine, bromine, fluorine, trifluoromethyl, hydroxyl and sulfo, or

- D is a naphthyl radical which may be substituted by 1, 2 or 3 substituents which belong to the group of substituents consisting of sulfo, carboxyl, methyl, ethyl, methoxy, ethoxy, alkanoylamino of 2 to 5 carbon atoms which may be substituted, optionally substituted benzoylamino, chlorine, hydroxyl and nitro, or
- D is the phenyl radical which is substituted by the $-\text{SO}_2\text{-Y}$ group shown and may be further substituted by 1 or 2 substituents which belong to the group of substituents consisting of alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxyl, alkanoylamino of 2 to 5 carbon atoms which may be substituted, optionally substituted benzoylamino, phenylamino, sulfophenyl-amino, carbamoyl which is monosubstituted or disubstituted by alkyl or 1 to 4 carbon atoms sulfamoyl, which is monosubstituted or disubstituted by alkyl of 1 to 4 carbon atoms, N-phenylsulfamoyl, N-phenyl-N-($\text{C}_1\text{-C}_4\text{-alkyl}$)-sulfamoyl, cyano, nitro, chlorine, bromine, fluorine, trifluoromethyl, hydroxyl and sulfo, or
- D is a naphthyl radical which is substituted by the $-\text{SO}_2\text{-Y}$ group shown and can be further substituted by 1 or 2 substituents which belong to the group of substituents consisting of sulfo, carboxyl, methyl, ethyl, methoxy, ethoxy, alkanoylamino of 2 to 5 carbon atoms, which can be substituted, optionally substituted benzoylamino, chlorine, hydroxyl and nitro;
- E is the radical of a couplable and diazotizable compound which in the synthesis of compounds (1) serves first as a coupling component and then as a diazo component, and represents a phenylene radical, which can be substituted by 1 or 2 substituents which are selected from the set consisting of 2 alkyl of 1 to 4 carbon atoms, 2 alkoxy of 1 to 4 carbon atoms, 2 chlorine, 1 bromine, 1 alkanoylamino of 2 to 5 carbon atoms, which can be substituted, 1 benzoylamino, 2 sulfo, 1 carboxyl, 1 N, N-dialkyl-amino having alkyl groups of 1 to 4 carbon atoms each, 1 ureido, 1 phenylureido and 1 alkylsulfonlamino of 1 to 4 carbon atoms, or denotes a naphthylene radical, which can be substituted by 1 or 2 sulfo groups or by an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group or the $-\text{SO}_2\text{-Y}$ group shown and 1 or 2 sulfo groups and an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group, or represents a naphthylene radical which contains bonded in the ortho-position relative to that Azo group to which also the formula radical D is linked an amino group, an alkylamino group of 1 to 4 carbon atoms or an optionally substituted phenylamino group or a hydroxyl group and which can be additionally substituted by 1 or 2 sulfo groups or an alkyl group of 1 to 4 carbon atoms, a nitro group or an alkanoylamino group of 2 to 5 carbon atoms, or additionally by 1 or 2 sulfo groups and an alkyl group of 1 to 4 carbon atoms, a nitro group or an alkanoylamino group of 2 to 5 carbon atoms;
- K is a 1-hydroxynaphthylene radical which contains bonded in the 2-position the azo group or is a 2-hydroxynaphthylene radical which contains bonded in the 1-position the azo group, both of which can be substituted by 1 or 2 sulfo groups or by an optionally substituted alkanoyl-amino group of 2 to 5 carbon atoms or a benzoylamino group or by 1 or 2 sulfo groups and an optionally substituted alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group, or
- K is a naphthylene radical which can be substituted by 1 or 2 sulfo groups, or by 1 or 2 sulfo groups and an optionally monosubstituted or disubstituted amino group, the substituents of the amino group belonging to the groups of substituents consisting of alkyl of 1 to 4 carbon atoms, hydroxyalkyl of 1 to 4 carbon atoms, carboxyalkyl of 2 to 5 carbon atoms, sulfoalkyl of 1 to 4 carbon atoms, sulfatoalkyl of 1 to 4 carbon atoms, cyanoalkyl of 2 to 5 carbon atoms, carbalkoxyalkyl having alkyl radicals of 1 to 4 carbon atoms each, phenylalkyl having an alkyl radical of 1 to 4 carbon atoms, it being possible for the phenyl radical to be substituted by methyl, ethyl, methoxy, ethoxy, chlorine, sulfo and/or carboxyl, phenyl and phenyl which is substituted by alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, chlorine, carboxyl and/or sulfo, or
- K is a 1-aminonaphthylene radical which contains bonded in the 2-position the azo group or is a 2-aminonaphthylene radical which contains bonded in the 1-position the azo group, it being possible for the two aminonaphthylene radicals to be substituted by 1 or 2 sulfo groups or by a hydroxyl group in the 5-, 6-, 7- or 8-position or by this hydroxyl group and 1 or 2 sulfo groups, or
- K is a phenylene radical, which can be substituted by 1 or 2 substituents which belong to the group of substituents consisting of 2 alkyl of 1 to 4 carbon atoms, 2 alkoxy of 1 to 4 carbon atoms, 2 chlorine, 1 bromine, 1 alkanoylamino of 2 to 5 carbon atoms, which can be substituted, 1 benzoylamino, 1 sulfo, 1 carboxyl, 1 ureido, 1 phenylureido, 1 alkylsulfonlamino of 1 to 4 carbon atoms, 1 amino and 1 monosubstituted or disubstituted amino whose substituents are alkyl of 1 to 4 carbon atoms, hydroxyalkyl of 1 to 4 carbon atoms, carboxyalkyl of 2 to 5 carbon atoms, sulfoalkyl of 1 to 4 carbon atoms, sulfatoalkyl of 1 to 4 carbon atoms, cyanoalkyl of 2 to 5 carbon atoms, carbalkoxyalkyl having alkyl radicals of 1 to 4 carbon atoms each, phenylalkyl having an alkyl radicals of 1 to 4 carbon atoms, whose phenyl radical can be substituted by methyl, ethyl, methoxy, ethoxy, chlorine, carboxyl and/or sulfo, phenyl and phenyl which is substituted by alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, chlorine, carboxyl and/or sulfo;
- Y is the vinyl group or a β -thiosulfatoethyl, β -phosphato-ethyl, β -chloroethyl or β -sulfatoethyl group;
- Z is a radical of the general formula (3)



in which

R¹ stands for a hydrogen atom or an optionally substituted alkyl group of 1 to 4 carbon atoms, it being possible for the two R¹s to be identical to or different from each other,

R denotes a hydrogen atom or a sulfo group and Y has the abovementioned meaning, it being possible for both Ys to be identical to or different from each other; which comprises reacting a compound of the general formula (5) where D, E, K, Y, k and R¹ have the meanings mentioned above with a dichloro triazine compound of the general formula (6) in which R¹, R and Y have the meanings mentioned above with elimination of 1 mol of hydrogen chloride, get the compound of formula 1.

Compl. specn. 57 pages.

Drgs. 5 shetse

CLASS : 13-A; 128-G

164697

Int. Cl. : A 61 b 19/00, B 65 d 30/00.

CLOSABLE BAG AND METHOD AND ARRANGEMENT FOR ASEPTIC FILLING THEREOF.

Applicant ALFA-LAVAL FOOD & DAIRY ENGINEERING AB, OF 22103 LUND 1, SWEDEN.

Inventor : KARL MARTENSSON.

Application 350/Cal/86 filed May 85, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

Closable bag of flexible material, which is provided with a separate inlet member (3) having an opening for filling of the bag with material, for instance liquid said inlet member (3) being connected to the bag, and a separate member (7) for closing of the filling opening from the inside of the bag, characterized in :

- that the separate inlet and closing members (3, 7) are of stiffer material than the bag, and are substantially resistant to deformation;
- that the closing member (7) for its closing of the filling opening is arranged for releasable sealing engagement with the inlet member, thereby enabling a subsequent partial discharge and reclosing of the bag; and
- that the inlet and closing members both have means (6, 12) for engagement with an operating equipment arranged outside the bag, such that at least one of said members (3, 7) is movable relative to the other for uncovering or closing, respectively, of the filling opening, said means being adapted for engagement with the operating equipment when filling opening is uncovered as well as

when it is closed and the closing member is sealing engagement with the inlet member.

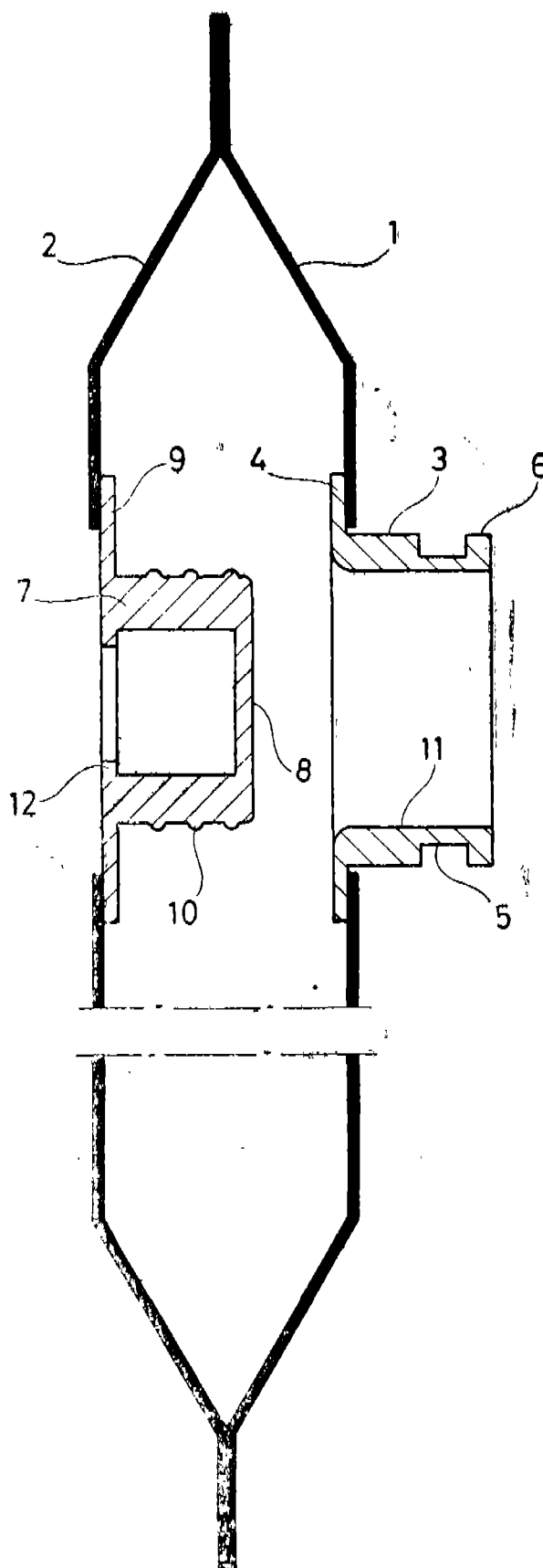


Fig. 1

Compl. spen. 13 pages

Drg. 3 sheets

CLASS :

164698

Int. CL : H 04 b 1/00.

VOLTAGE PULSE TO CURRENT REGULATING CONVERTER.

Applicant : THE BABCOCK & WILCOX COMPANY,
AT 1010 COMMON STREET, P.O. BOX 60035, NEW
ORLEANS, LOUISIANA 70160, U.S.A.

Inventors : (1) EDWARD STERLING, (2) EDWARD
BASTIJANIC.

Application No. 354/Cal/86 filed May 06, 1986.

Appropriate office for opposition proceedings (Rule 4,
Patents Rules, 1972) Patent Office, Calcutta.

8 Claims

A voltage pulse to current regulating converter comprising :

pulse generator means for generating a voltage pulse train having a selected frequency and a variable duty cycle;

a low pass filter connected to said pulse generator means for receiving said voltage pulse train and for generating a D/C voltage level which corresponds to the duty cycle of said voltage pulse train, said low pass filter having a cut-off frequency which is less than said selected frequency of the voltage pulse train generated by said pulse generator means;

a loop current regulating circuit connected between an output of the said low pass filter, and a power supply, which latter is adapted to supply current to a current loop of the said loop current regulating circuit, said current being proportional to said D/C voltage level.

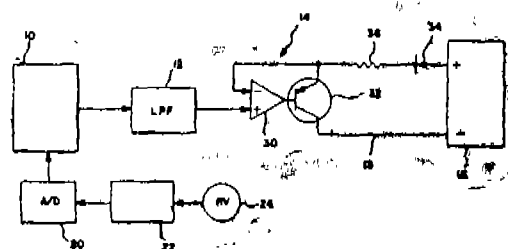


Fig. 1

Compl. specn. 10 pages

Drg. 2 sheets

CLASS : 15-D & 120-B₅

164699

Int. CL : B 23 q 11/00, F 01 d 25/18,

F 01 m 11/04, F 16 c 33/00, 35/00.

DEVICE FOR THE LEAKAGE-FREE REMOVAL OF BEARING OIL FROM SLIDING BEARING FOR ROTATING SHAFTS OF HIGH-SPEED MACHINES.

Applicant : KRAFTWERK UNION AKTIENGESSELLSCHAFT, OF 433 MULHEIM (RUHR), WIESENSTR. 35, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) OEYNHAUSEN HEINRICH, (2) WINKELHAKE ERNST.

Application No. 643/Cal/86 filed August 25, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

Device for the leakage-free removal of bearing oil sliding bearings for rotating shafts of high-speed machines, comprising :

a shaft with an outer surface rotating in a given direction throwing off an oil spray fan including oil sprays from a downwardly directed portion of said outer surface;

a sliding bearing having sides and being axially divided into bearing cups along a parting line and having sliding bearing surfaces supporting said shaft and two bearing end surfaces;

contactless shaft seals in the vicinity of said bearing end surfaces preventing escape to the surroundings of bearing oil fed under pressure to said sliding bearing surfaces;

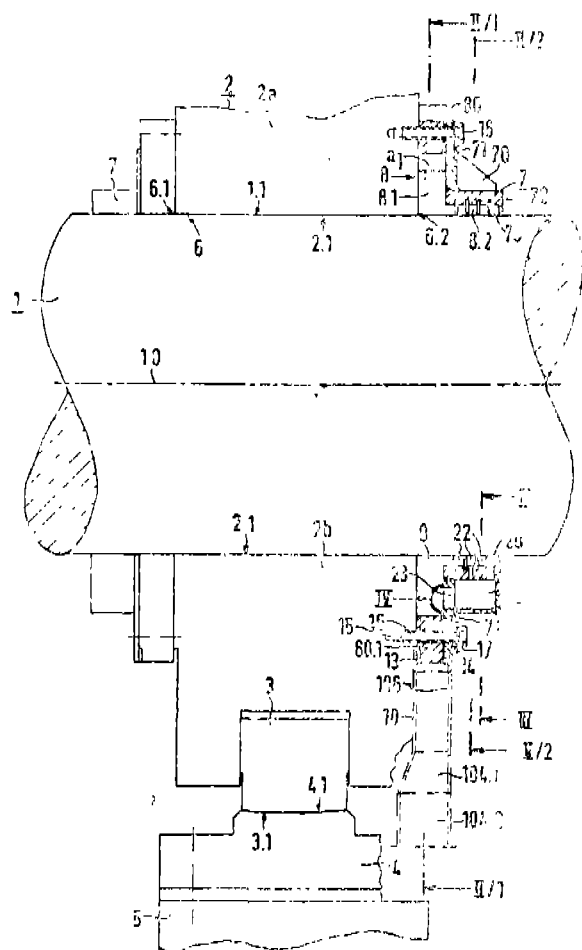
an annular oil collecting canal disposed at least at one of said sides of said sliding bearing between one of said shaft seals and one of said bearing between one of said shaft seals and one of said bearing end surfaces;

said annular oil collecting canal having an outer contour with a geodetically lowest point and an outer contour with a geodetically lowest point and an outer peripheral wall having an arcuate cutout formed therein with a slot-shaped opening arc defining an outlet opening through which said annular oil collecting canal discharges an oil flow;

said opening arc having an outlet cross section and covering a circumferential angular range of said shaft extending at least from said shaft extending at least from said geodetically lowest point of said outer contour at most to a position of said outer contour defined by said parting line as seen in said given shaft rotation direction;

an oil collecting box having an oil flow space therein and having an inlet opening formed therein matched to said outlet cross-section of said opening arc and sealed to said opening arc for receiving oil from said outlet opening, tangentially arched baffles dividing said oil flow space into a plurality of oil flow channels for dividing said oil spray fan and downwardly deflecting said oil spray thereof; and

a common downwardly directed transition piece receiving the oil flow from said oil flow channels.



a plurality of first nozzles in said cooling zone located beneath and along said path;

air supply means having ducts communicating with said first nozzles for causing a flow of cooling air to be emitted from said first nozzles for upward application against the rod rings in said cooling zone;

characterised by a plurality of second nozzles in communication with water supply means for applying water to the rod ring in said cooling zone whereby some of the thus applied water is converted into steam by the heat of the rod rings and the remainder of the thus applied water is returned via said first nozzles to said ducts;

steam removal means for removing said steam from the vicinity of said path; and

water removal means for removing the thus returned water from said ducts.

Compl. specn. 17 pages

Drg. 3 sheets

Int. CLASS⁺: CO1B 3/50;

164703

CO 7 C 7/13.

PROCESS FOR THE RECOVERY OF HYDROGEN AND C₁-C₉ HYDROCARBONS FROM THE EFFLUENT STREAM OF A HYDROGEN PRODUCING HYDROCARBON CONVERSION PROCESS.

Applicant : UOP, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE IN THE UNITED STATES OF AMERICA, WITH ITS PRINCIPAL PLACE OF BUSINESS LOCATED AT TEN UOP PLAZA, ALGONQUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS 60016, U.S.A.

Inventor : PAUL CLAYTON STEACY.

Application for Patent No. 738/Del/85 filed on September 9, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

7 Claims

A process for the recovery of hydrogen and C₁-C₉ hydrocarbons from the effluent stream of a hydrogen-producing hydrocarbon conversion process which comprises the steps of :

(a) separating the reaction zone effluent stream, which comprises hydrogen and a mixture of C₁-C₉ hydrocarbons, in a first vapor-liquid separation zone, into a vapor phase first process stream, which comprises hydrogen and C₁-C₃ hydrocarbons, and a condensate stream, which comprises C₄-C₉ hydrocarbons;

(b) passing the condensate stream from step (a) above into a fractionation zone in which of C₈-C₉ product of the hydrocarbon conversion process is recovered characterised in that;

(c) compressing the first process stream to a pressure above 300 psig (2068k Pag);

(d) passing the first process stream into a membrane separation zone in which the first process stream is contacted with semipermeable membrane which selectively allows the permeation of hydrogen and thereby producing a hydrogen-rich product stream which is recovered from the process and a vapor phase second process stream which comprises C₁-C₈ hydrocarbons;

(e) forming a vapor phase third process stream, which comprises methane, and a liquid phase fourth process stream, which comprises ethane and propane by partially condensing the second process stream by indirect heat exchange against a cooling medium followed by vapor-liquid separation in a second vapor-liquid separation zone maintained at a pressure above 300 psig (2068 k Pag);

(f) flashing the fourth process stream to a substantially lower pressure and thereby forming a vapor phase sixth process stream, which comprises ethane, and a liquid phase fifth process stream, which comprises propane, with the fourth and fifth process streams being substantially cooler than the second process stream;

(g) employing the fifth process stream as at least a part of the previously referred to cooling medium used in step (c) to partially condense the second process stream; and,

(h) recovering the sixth process stream from the process.

Compl. specn. 19 pages

Drg. 1 sheet

Int. CLASS⁺: C 01 D 1/22

164704

PROCESS FOR PREPARING ALKYLENE OXIDES FROM ALKYLENE CARBONATES.

Applicant : THE HALCON SD GROUP, INC., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, HAVING ITS OFFICE AND PRINCIPAL PLACE OF BUSINESS AT 2 PARK AVENUE, NEW YORK, NEW YORK 10016, UNITED STATES OF AMERICA.

Inventor : ROBERT MICHAEL WEINSTEIN.

Application for Patent No. 754/Del/85 filed on 13th September, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

6 Claims

A process for the preparation of alkylene oxide from alkylene carbonate comprising reacting the alkylene carbonate with a quaternary arsonium halide in an amount such as herein defined, wherein said quaternary arsonium halide is of the formula R₁R₂R₃R₄ AsX, wherein R₁R₂R₃R₄ is a member of the group consisting of hydrogen, alkyl, cycloalkyl, aryl, alkenyl, and cycloalkenyl, and may be the same or different; and X is a member of the group consisting of chlorine, bromine, and iodine.

Compl. specn. 11 pages.

Int. CLASS⁴: F16D 65/14

164705

ROD ACTUATOR FOR AUTOMATIC SLACK ADJUSTING MECHANISMS IN COMACTUATED BRAKE ASSEMBLY.

Applicant : ROCKWELL INTERNATIONAL CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 600 GRANT STREET, PITTSBURGH, PENNSYLVANIA 15219, UNITED STATES OF AMERICA.

Inventor : DANIEL LAVELLY.

Application for Patent No. 797/Del/85 filed on 30th September, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

9 Claims

A rod actuator for automatic slack adjusting mechanism in a camactuated brake assembly, said actuator comprising :

an actuating rod connected to the lever to move the lever;

a clevis attached to the actuating rod;

a shaft connected to the lever;

a threaded plunger connected to the shaft;

a piston mounted for limited movement in the plunger, and an adjusting worm connected to the plunger and an adjusting gear connected to the worm and to the lever;

a flexible boot seal provided with an enlarged lip, which actuator comprises an elongate rod member having a first hole therethrough at a first end thereof for attaching to the clevis, and a second hole therethrough at a second end thereof;

for attaching to the piston, an elongate jacket member having a longitudinally extending cavity therethrough for receiving the rod member therein and in alignment with the first end of the rod member;

the jacket member including an opening therethrough and positioned such that when the first end of the rod member is aligned within the cavity;

the first hole is aligned with the opening and a pin passing through the clevis, the first hole and the opening for attaching the rod actuator to the clevis and holding the rod member and the jacket member assembled together.

Compl. specn. 11 pages

Drg. 2 sheets

Int. CLASS⁴: H01M 6/04

164706

AN IMPROVED ALKALINE PRIMARY BATTERY CELL.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : KANNIYA BALUSAMY SARANGAPANI, VEERACHAMY BALARAMACHANDRAN, VASUDEVA SASTRI KAPALI, SUBRAMANIAN VENKATAKRISHNA IYER, MAHADEV GOVIND POTDAR AND KUMMITTITHIDAI SANTHANAM RAJAGOPALAN.

Application for Patent No. 851/Del/85 filed on 14th October, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

9 Claims

An improved alkaline primary battery cell comprising : an anode, cathode and an electrolyte characterised in that the anode used is a commercial 25-aluminium (99% pure), and the electrolyte is an alkali hydroxide in concentration ranging from 2N to 5N and containing-sodium citrate and/or tartrate as complexing agent;

conventional additives such as metals, metal oxides including rare earth oxides and salts of metalloids

and conventional corrosion inhibitors.

Compl. specn. 11 pages.

Int. CLASS⁴: F16D 49/00, 65/00

164707

A STAMPED METAL SUPPORT PLATE FOR SUPPORTING A BRAKE ASSEMBLY ON A VEHICLE AXLE.

Applicant : ROCKWELL INTERNATIONAL CORPORATION, A DELAWARE CORPORATION, U.S.A., HAVING AN OFFICE AT 600 GRANT STREET, PITTSBURGH PENNSYLVANIA 15219, UNITED STATES OF AMERICA.

Inventor : ROBERT JOHN BARONI.

Application for Patent No. 951/Del/85 filed on 15th November, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

11 Claims

A stamped metal support plate for supporting a brake assembly on a vehicle axle, said support plate comprising :

a substantially planar and circular mounting portion;

first and second support portions of said plate located on diametrically opposite sides of said circular mounting portion, said first and second portions being offset in opposite directions from a plane of said circular mounting portion;

said first and second support portions of the plate being integrally joined to said mounting portion by respective first and second transition sections of the plate; and

a pair of reinforcing ribs, each rib extending continuously along opposite edges of the plate from said first support portion across said circular mounting portion and substantially across said second support portion, said ribs projecting from the plate in the same direction said second support portion is offset from the plane of said circular mounting portion.

Compl. specn. 17 pages

Drgs. 3 sheets

Int. CLASS⁴: B01D 53/02, B01J 12/00

164708

PROCESS FOR INCREASING THE CONCENTRATION OF ONE COMPONENT SUCH AS OXYGEN IN A MULTI-COMPONENT GASEOUS MIXTURE SUCH AS AIR.

Applicant : PROGRESS EQUITIES INCORPORATED, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF FLORIDA, U.S.A., OF 270 FIRST AVENUE SOUTH, ST. PETERSBURG, FLORIDA-33733, UNITED STATES OF AMERICA.

Inventor : WILLIAM WES BERRY.

Application for Patent No. 976/Del/85 filed on 20th November, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

8 Claims

A process for enriching a component gas such as oxygen of a multiple component gas mixture such as air characterized by supplying at periodic intervals a stream of the multiple component gas into a plurality of adsorbent filled chambers from the chamber inlet to pass through the adsorbent and be discharged from the chamber through an outlet, the adsorbent being capable of adsorbing the component to be enriched to a greater degree than all other components, supplying ambient air at a selected temperature to a first one of said chambers while adsorbing oxygen from the ambient air on the adsorbent and discharging oxygen depleted-air from said first chamber, mixing and heating to a temperature greater than said selected temperature the oxygen-depleted air from the first chamber with ambient air and oxygen-rich air from a second chamber, supplying the heated mixture of the preceding step to said first chamber to desorb the oxygen from the adsorbent, diving the oxygen-enriched air from said first chamber into a first stream and a second stream, cooling said first stream and supplying said first stream to a third one of said chambers where oxygen is adsorbed from said stream on the adsorbent, heating said second stream and supplying said second stream to said third chamber to produce a discharge stream having a further enriched oxygen content, said discharge stream being substantially continuous in flow is recovered by any known manner.

Compl. specn. 17 pages

Drg. 4 sheets

Int. CLASS⁴ : B65D 35/00, 35/10, 164709
B32B 27/28.

IMPROVED LAMINATE OF LAYERS OF ETHYLENE PROPYLENE COPOLYMER, METAL FOIL AND PAPER COLLAPSIBLE PASTE DISPENSING CONTAINER MADE THEREFROM.

Applicant : COLGATE-PALMOLIVE COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 300 PARK AVENUE, NEW YORK, NEW YORK 10022, UNITED STATES OF AMERICA.

Inventors : EDWARD ALBERT TAVSS, JOHN SANTALUCIA AND DAVID LEIGH CARROL.

Application for Patent No. 1037/Del/85 filed on 9th December, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

7 Claims

An improved laminate comprising :

a first layer of an ethylene propylene copolymer;

a second layer of metal foil;

a third layer of paper and a fourth layer of an ethylene propylene copolymer;

said layers being bonded to one another by conventional methods.

Compl. specn. 10 pages

Drg. 1 sheet

Int. CLASS⁴ : H01F 27/00

164710

IMPROVED INSULATED ELECTRODES FOR POWER TRANSFORMERS OF HIGH VOLTAGE DIRECT CURRENT CONVERTER PLANTS.

Applicant : ASEA AKTIEBOLAG, SWEDISH CORPORATION, OF VASTERAS, SWEDEN.

Inventor : BERTIL MORITZ.

Application for Patent No. 1116/Del/85 filed on 30th December, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

9 Claims

An improved insulated electrode as defined herein for power transformers of high voltage direct current (HVDC) convertor plants characterised in that said electrode is provided externally with an insulating lining comprising three or more layers of a wrapping material having a fibrous and porous structure, the pores of each layer of said lining each having an area of 0.2 to 10 sq. mm. with the total surface area of the pores being from 20% to 80% of the total surface area of the wrapping material.

Compl. specn. 11 pages

Drg. 3 sheets

Int. CLASS⁴ : B 28 D 7/00

164711

APPARATUS FOR EXAMINING AN UNFINISHED GEMSTONES.

Applicant : ETABLISSEMENT GERSAN, OF STADEL 36, 9490, VADUZ, LEICHTENSTEIN, A LOICHTENSTEIN COMPANY.

Inventor : ANDREW DAVID GARRY STEWART.

Application No. 258/Mas/85 filed April 2, 1985.

Convention dated to 29th May, 1984 Great Britain No. 8413605.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

5 Claims

Apparatus for examining an unfinished gemstone, comprising :

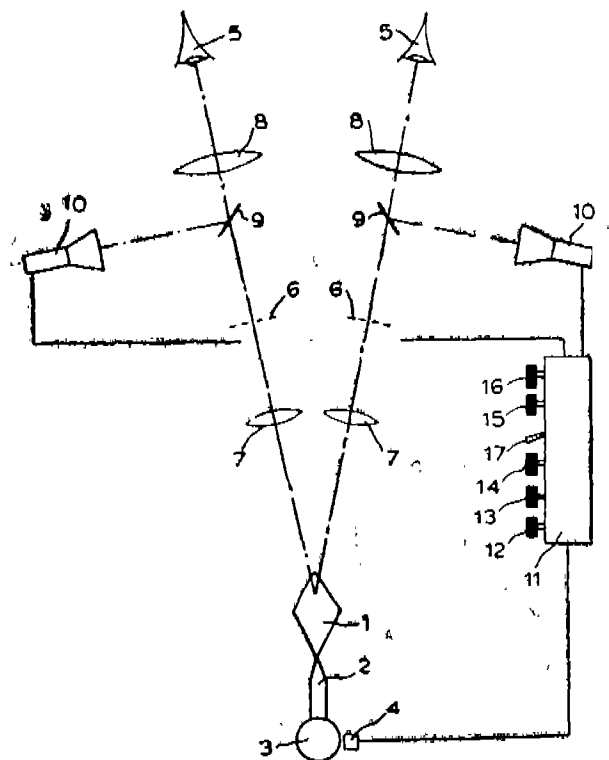
means for providing two stereo pair representations of a finished gemstone for superimposing a three dimensional gemstone for superimposing a three dimensional form gemstone or on an image thereof to determine how the finished stone(s) represented can be formed from the unfinished stone being examined;

means for altering the size of three-dimensional representation relative to the unfinished stone or image thereof;

means for altering the proportion of one dimension to another in the finished stone of the three-dimensional representation; and

means for relative rotation between the three-dimensional representation and the unfinished stone or image thereof;

a first transceiver for sending said data to said remote control center and for receiving control data therefrom.



Compl. specn. 12 pages.

Drg. 2 sheets

Int. Cl.4 : B 60 P 1/00

164712

AN APPARATUS ON-BOARD A VEHICLE FOR ACQUISITIONING DATA INDICATIVE OF VEHICLE OPERATION AND FOR RELAYING SAID DATA TO A REMOTE CONTROL CENTER.

Applicant & Inventor : LeROY G. HAGENBUCH, A CITIZEN OF THE UNITED STATES, OF 4602 N. ROSEMEAD, PEORIA, ILLINOIS 61604, COUNTRY OF PEORIA, STATE OF ILLINOIS, U.S.A.

Application No. 296/Mas/85 filed April 18, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

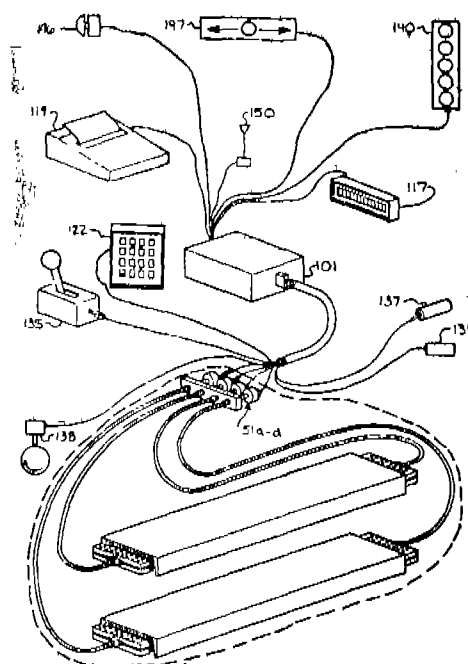
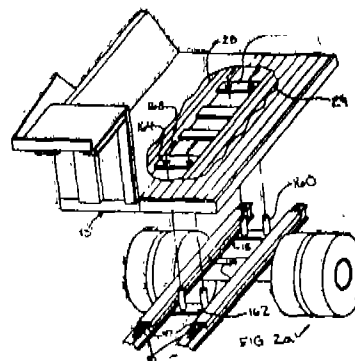
31 Claims

An apparatus on-board a vehicle among a plurality of vehicles, for acquisitioning data indicative of vehicle operation and for relaying said data to a remote control center where the data is processed to create control signals that are delivered back to said apparatus for the purpose of instructing the vehicle operator regarding vehicle movement, said apparatus comprising :

means (1) mounted to said vehicle for providing data indicative of the loading of material into a dump body of said vehicle and the dumping of said material by said dump body;

means (2) mounted to said vehicle for providing data indicative of the movement of said vehicle;

a first processor means on-board said vehicle for acquiring said data from means (1) and (2) organizing said data for downloading to a remote control center; and



Compl. specn. 109 pages

Drg. 25 sheets

Int. CLASS4 : H 03 K 17/94

164713

DEVICE FOR CONTROLLING THE CARRIER OF AN AMPLITUDE-MODULATED TRANSMITTER.

Applicant : BBC BROWN, BOVERI LIMITED, OF CH-5401 BADEN, SWITZERLAND, A SWISS COMPANY.

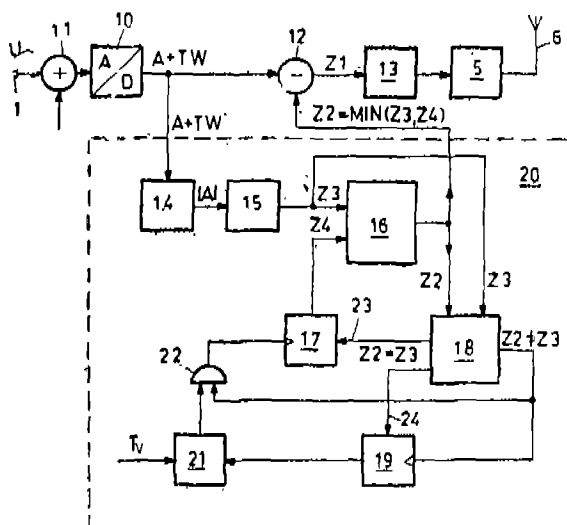
Inventor : ANDREAS FURRER.

Application No. 317/Mas/85 filed April 27, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

5 Claims

Device for controlling the carrier of an amplitude modulated transmitter comprising an input terminal (1) for the useful signal (UN), an analog/digital converter (10) which is connected to the input terminal (1) for sampling and converting the useful signal (UN) into digital amplitude values, a digital switching amplifier (13) and a transmitter output stage (5) which is connected to the output of the digital switching amplifier (13), wherein between the output of the analog/digital converter (10) and the input of the digital switching amplifier (13) a subtraction circuit (12) and a digital computing circuit (20) for calculating the digital control-signal value (Z1) are arranged in so that the first input of the subtraction circuit (12) and the input of the digital computing circuit (20) are connected to the output of the analog/digital converter (10), the second input of the subtraction circuit (12) is connected to the output of the digital computing circuit (20) and the output of the subtraction circuit (12) is connected to the input of the digital switching amplifier (13).



Compl. specn. 17 pages

Drg. 4 sheets

Int. CLASS⁴: C 07 C 126/02

164714

IMPROVED PROCESS FOR UREA PRODUCTION.

Applicant : AMMONIA CASALE S.A., OF VIA DELLA POSTA 4, LUGANO (SWITZERLAND), A SWISS COMPANY AND UMBERTO ZARDI, OF VIA LUCINO 57, BREGANZONA (LUGANO) SWITZERLAND, AN ITALIAN NATIONAL.

Inventor : UMBERTO ZARDI.

Application No. 319/Mas/85 filed 27 April 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

10 Claims

In a process for the production of urea from ammonia and carbon dioxide at an effective pressure and temperature wherein the urea formation takes place in at least one synthesis zone and in which an excess of free ammonia is present to favor high conversion, thereby producing a urea composition containing an excess of free ammonia, residual carbamate and urea and the residual carbamate is removed by stripping the urea composition with a counter current stream of a major amount of fresh CO₂, the improvement comprising prior to contacting the urea composition with the major amount of fresh CO₂, adiabatically contacting the urea composition with a minor amount of

fresh CO₂ to thereby remove an amount of NH₃ from the urea composition which is substantially free of water vapor.

Compl. specn. 21 pages

Drg. 2 Sheets

Int. CLASS⁴: C 25 C 3/06; 3/20; 3/22

164715

AN APPARATUS FOR AUTOMATICALLY INCREASING THE RATE OF SUCTION EXTRACTION OF GASES EMITTED BY A SERIES OF TANKS DURING PRODUCTION OF ALUMINIUM.

Applicant : ALUMINIUM PECHINEY, OF 23 RUE BALZAC, 75008 PARIS, FRANCE, A FRENCH COMPANY.

Inventors : (1) GEORGES DUPRAT, (2) BERNARD LANGON, (3) BENOIT SULMONT.

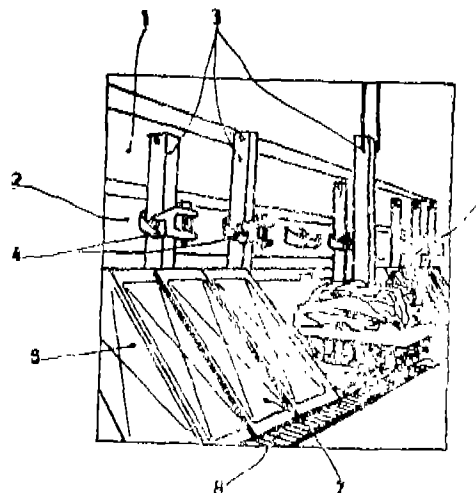
Application No. 320/Mas/85 filed April 27, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

6 Claims

An apparatus for automatically increasing the rate of suction extraction of gases emitted by a series of tanks during production of aluminium by igneous electrolysis using the Hall-Heroult process, each tank being closed around its periphery by a plurality of removable covers which are disposed in substantially sealed relationship with each other and between each thereof and their support means on the periphery of the tank, the gases being collected over each tank by at least one duct connected to a centralized suction extraction system, said apparatus comprising :

- a means for measuring the temperature of the gases t(i) in each duct (i),
- a means for comparing t(i) to a first threshold t₁(i) and to a second reference value t₂(i),
- a means for automatically starting the increased suction extraction effect when t(i) is equal to or lower than t₁(i),
- a means for automatically stopping the increased suction extraction effect when t(i) becomes equal to or higher than t₁(i) again, and
- a means for controlling the gaseous flow rate in the duct of each tank.



Compl. specn. 18 pages

Drg. 2 sheets

Int. CLASS¹ : C07c 29/04; 31/10; 31/12 164716**IMPROVEMENT IN A PROCESS FOR CONTINUOUS PRODUCTION OF A SECONDARY ALCOHOL HAVING 3 TO 4 CARBON ATOMS.**

Applicant : DEUTSCHE TEXACO AG., A GERMAN COMPANY, OF UBERSEERING 40, 2000 HAMBURG 60, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) WILHELM NEIER, (2) WERNER WEBERS, (3) MICHAEL DETTMER, (4) GUNTHER OSTERBURG.

Application No. 369/Mas/85 filed May 17, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

6 Claims

Improvement in a process for continuous production of a secondary alcohol having 3 to 4 carbon atoms comprising direct hydration of the corresponding olefin having 3 to 4 carbon atoms with water in the presence of an acidic catalyst and in an elongate reaction zone at a temperature of 100 to 200°C and pressure of 40 to 120 bar to provide reaction product; isolating ether formed as a byproduct from the reaction product; and recycling the ether to the reaction zone; the improvement being that the ether is fed separately from the reactants (olefin and water) to a region of the reaction zone situated at a distance of from 5 to 30% of the length of the reaction zone from the downstream end of the reaction zone.

Compl. specn. 14 pages

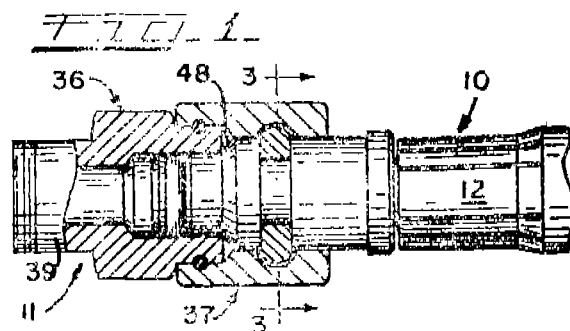
Drg. 2 sheets

each of said legs having two radial sides (55, 56) and a bottom said (54) interconnecting said radial sides (55, 56) each of said legs (52, 53) further having an arcuate outer side (57) that connects said radial sides (55, 56) and is opposite from said bottom side (54);

said radial sides (55, 56) of said legs, (52, 53) being substantially parallel to said side walls (25, 26) of said groove (23) wherein said bottom said (54) is adjacent to said bottom wall (24);

said radial sides (55, 56) of said legs (52, 53) have a radial dimension greater than that of said radial side walls (25, 26) of said groove (23); and

said outer sides (57) has substantially the same radius as said bores (46, 47).



Compl. specn. 15 pages

Drg. 1 sheet

Int. CLASS¹ : F16L 37/00 164717**A COUPLING SUCH AS USED FOR CONNECTING A HOSE.**

Applicant : STRATOFLEX, INC., 220 ROBERTS CUT-OFF, FORT WORTH, TEXAS 76114, U.S.A. INCORPORATED IN THE STATE OF TEXAS.

Inventor : HORISE MILTON COOKE.

Application No. 370/Mas/85 filed May 17, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

7 Claims

A coupling such as used for connecting a hose comprising :

a tubular nipple (16) and a tubular adapter sleeve (37);

having an axially extending flow passage formed therethrough (38), and said sleeve (37) being positioned around a portion of said nipple (16) when said parts are in fully assembled relation;

said nipple (16) having an annular groove (23) formed in the outer periphery thereof and said sleeve (37) having two bores (46, 47) formed therethrough;

said bores being aligned with said groove and extending tangentially of said groove when they are assembled;

said groove (23) being rectangular in radial cross section and having two spaced radial side walls (25, 26) and an axially extending bottom wall (24) connecting said radial side walls, and said bores (46, 47) having a circular cross section and overlying said groove (23) when they are assembled;

a U-shaped clip (51) having legs (52, 53) thereof positioned in said bores (46, 47) and grooves (23) for holding said parts in assembled relation;

Int. CLASS¹ : D06M 15/19

164718

A PROCESS FOR PREPARING AN IMPREGNATED CLOTH.

Applicant : STAHL CHEMICAL INDUSTRIES B.V., OF SLUISWEG 10, 5145 PE WAALWIJK, THE NETHERLANDS, OF DUTCH NATIONALITY.

Inventor : SPEK DIRI PIETER; VAN DER HEYDEN.

Application No. 373/Mas/85 filed 21st May 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

5 Claims

A process for preparing an impregnated cloth which comprises :

impregnating the cloth in an impregnating bath containing a coagulable polymer latex such as herein described;

a heat-coagulant such as organopolysiloxanes or derivatives thereof, polyvinyl alkylethers or derivatives thereof, polyacetals, polythio ethers, poly (ethylene oxide) or derivatives thereof, poly (propylene/ethylene oxide) or derivatives thereof; and a known foaming agent, the resultant impregnated cloth is heated in a water phase at a temperature from 70 to 130°C to coagulate and foam the polymer.

Compl. specn. 18 pages

Drg. 'NIL'

Int. CLASS⁴: B 65 G 39/00

164719

Application No. 644/Mas/85 filed August 19, 1985.

AN APPARATUS FOR FILLING A CHUTE WITH RECTANGULAR CROSS-SECTION WITH FIBRE MATERIAL.

Applicant : MASCHINENFABRIK RIETER AG., A BODY CORPORATE ORGANISED UNDER THE LAWS OF SWITZERLAND, OF CH-8406 WINTERTHUR, SWITZERLAND.

Inventor : PAUL STAEHEL.

Application No. 476/Mas/85 filed June 25, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

8 Claims

An apparatus for filling a chute with rectangular cross-section with fibre material comprising a rotatable opening roller disposed above the chute with its axis of rotation parallel to a side surface of the feed chute and a feeding device for feeding fibre material which is located above the opener roller, wherein a diverter element (8) is provided which is located in the region of the fibre material flying off the opener roller (4) and serves to divert the fibre material from its flight direction and into the interior of the chute (7).

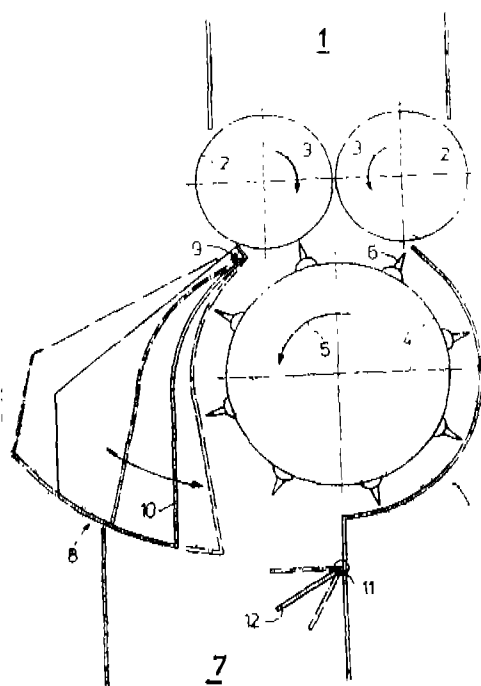


Fig. 1

Compl. specn. 8 pages

Drg. 1 sheet

Int. CLASS⁴: E 02 D 23/02

164720

AN IMPROVED MARINE SUBMERSIBLE STRUCTURE.

Applicant & Inventor : VIJAM JOSHUA, 1, TAYLORS ROAD, KILPAUK, MADRAS-600010, TAMIL NADU, INDIA, INDIAN NATIONAL.

1 Claim

An improved marine submersible structure comprising : one or more cellular container modules which are

interconnected by the projections provided therein;

each module being provided with an inner hull and an outer hull, the spaces between them constituting the Cellular spaces, on top of the modules;

openings are provided for filling with concrete and at least one valve is located within the inner hull and is connected to a hand wheel located outside the module by means of a control rod, the said valve is capable of regulating the flow of sea water into the structure to submerge, and to make the module buoyant when necessary, by pumping out the sea water contained therein.

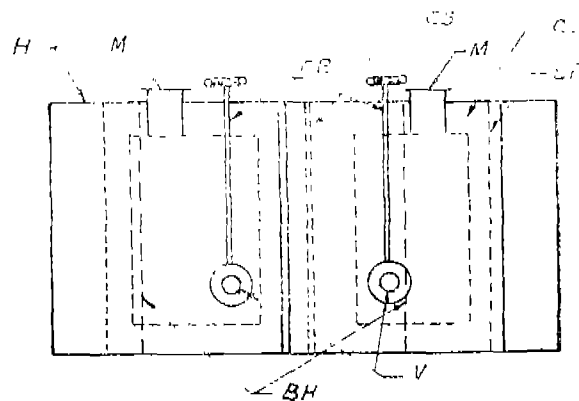


Fig. 2

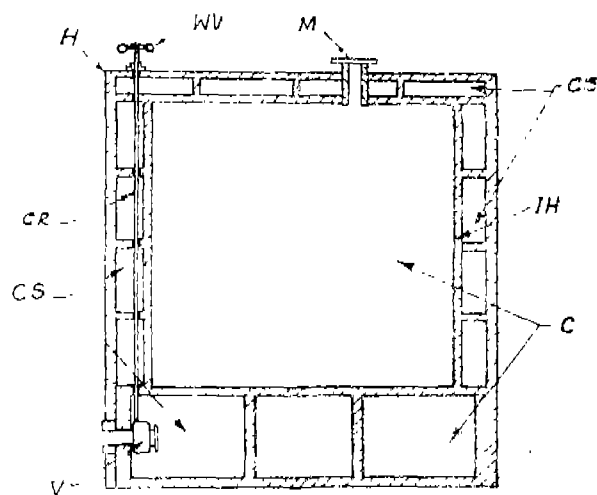


Fig. 3

Compl. specn. 6 pages

Drg. 3 sheets

REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. Nos. 160297 & 160298. AEG Aktiengesellschaft, Theodor-Stern-Kai 1, D-6000 Frankfurt 70 West Germany, a West German Company. "Switch Box". 21st October, 1988.

Class 1. No. 160308. Peico Electronics & Electricals Limited, of Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, an Indian Company. "a Reflector of a Luminaire". 24th October, 1988.

Class 1. Nos. 160327 & 160328. YOSHIDA KOGYO K. K., of No. 1, Kanda Izumi-cho, Chiyoda-ku, Tokyo, Japan, a Japanese Company. "a Slider for Slide Fasteners". 26th October, 1988.

Class 1. No. 160329. Peico Electronics & Electricals Limited, of Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay 400018, Maharashtra, India, an Indian Company. "a Luminaire". 26th October, 1988.

Class 1. No. 160482. Partecipazioni Bulgari S.P.A., an Italian Company of No. 5, Via Gregoriana-00187 Roma, Italy, a "Cuff-Links". 1st December, 1988.

Class 1. Nos. 160510 to 160512. Partecipazioni Bulgari S.P.A. an Italian Company of No. 5, Via Gregoriana-00187 Roma, Italy. an "Earring". 5th December, 1988.

Class 1. No. 160527. Safai Industries (India) Limited, 107/0, Khetani Textile Compound, Bazarward, Kurla, Bombay-400070, Maharashtra, India, a public limited company incorporated under the Indian Companies Act. "Luggage Lock". 7th December, 1988.

Class 3. No. 160127. Modi Rubber Limited, an Indian Company of Modinagar, Uttar Pradesh, India. a "Tyre for a Vehicle Wheel". 19th September, 1988.

Class 3. No. 160237. Choksons Private Limited, an Indian Company, of Saki Vihar Road, P.O. Box 843, Powai, Bombay-400 072, Maharashtra, India, and also at Tavawala Building, Pathak Wadi, Bombay-400002, Maharashtra, India. "Spn Switch Fuse". 10th October, 1988.

Class 3. No. 160240. Choksons Private Limited., an Indian Company, of Saki Vihar Road, P.O. Box 843, Powai, Bombay-400 072, Maharashtra, India, and also at Tavawala Building, Pathak Wadi, Bombay-400 002, Maharashtra, India. "Switch Socket Combined". 10th October, 1988.

Class 3. Nos. 160241 & 160242. Choksons Private Limited., an Indian Company, of Saki Vihar Road, P.O. Box 843, Powai, Bombay-400 072, Maharashtra, India, and also at Yavawala Building, Pathak Wadi, Bombay-400 002, Maharashtra, India. "Moulded Splitter Unit". 10th October, 1988.

Class 3. No. 160243. Choksons Private Limited an Indian Company, of Saki Vihar Road, P.O. Box 843, Powai, Bombay-400 072, Maharashtra, India, and also at Yavawala Building, Pathak Wadi, Bombay-400 002, Maharashtra, India. "5-pin Universal Switch Socket". 10th October, 1988.

Class 3. No. 160244. Choksons Private Limited., an Indian Company, of Saki Vihar Road, P.O. Box 843, Powai, Bombay-400 072, Maharashtra, India, and also at Yavawala Building, Pathak Wadi, Bombay-400 002, Maharashtra, India. "Moulded Spn Base". 10th October, 1988.

Class 3. No. 160330. Peico Electronics & Electricals Limited, of Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400018, Maharashtra, India, an Indian Company. "a Luminaire". 26th October, 1988.

Class 3. No. 160336 to 160338. Plasmac Industrie, an Indian Company, of A/8, Saraf Kaskar Industrial Estate, S.A. Road, Jogeshwari, Bombay-400 102, Maharashtra, India. "Pen Box". 28th October, 1988.

Class 3. No. 160365. M/s. Marudhar Plastic Industries, 3rd Floor, 48, Vithalwadi, Kalbadevi Road, Bombay-400002, Maharashtra, India, an Indian Proprietorship firm. "Comb". 10th November, 1988.

Class 3. Nos. 160406 to 160411. Consolidated Engineers WZ-1170, Ram Bagh, Sakur Basti, New Delhi, India, an Indian Partnership firm. "Paper Clips". 18th November, 1988.

Class 3. No. 160413. International Business Machines Corporation, a Corporation organised and existing under the laws of the State of New York, United States of America, of Armonk, New-York 10504, United States of America. a "Panel for Storage Devices in a Data Processing System" Reciprocity date is 20th June, 1988 (U.K.).

Class 3. No. 160501. Nand Kishore Khanna & Sons a Registered Partnership Firm of 102, Arun Chambers, Tardeo Road, Bombay-400 034, Maharashtra, India. 5th December, 1988.

Class 3. No. 160541. Diana Equipments Private Limited, (an Indian Company) at 13, Narayanbag, Indore-452 004, State of Madhya Pradesh, India. "Footvalve". 14th December, 1988.

Class 3. Nos. 160542 & 160543. Praduman Pratapsinh Asher (Indian National) of Queen's View, 28/30 Walkeshwar Road, Bombay-400 006, State of Maharashtra, India. "Soldering Iron". 14th December, 1988.

Class 3. No. 160548. Mohan Meakin Limited, an Indian Company Solan Brewery, P.O. 173 214, Simla Hills, Himachal Pradesh, India. "Bottle". 14th December, 1988.

Class 3. No. 160553. Hindustan Vacuum Glass Limited (a company incorporated under the Indian Companies Act), whose address is Sanskriti Bhawan, New Delhi-110055, India. "Vacuum Flask" (Thermos). 16th December, 1988.

Class 3. No. 160560. Hindustan Lever Limited, 165/166, Backbay Reclamation, Bombay-400 020, Maharashtra, India. "Bottle with Cap". Reciprocity date is 20th June, 1988 (U.K.).

Class 5. No. 160200. Sangeeta Tea Suppliers, a registered Partnership firm at 3/12/59 Raja Bazar, Aurangabad-431 001, State of Maharashtra, India. "Packet". 28th September, 1988.

Class 6. No. 160348. Vawaco Enterprises, 326, Allied Industrial Estate, Bombay-400 016, State of Maharashtra, India, a Proprietary concern. Watch Strap". 2nd November, 1988.

Nos. 157963, 157964, 155063.Class 1.

Nos. 155733, 155780, 157667, 157961, 157962, 157960, 156602, 148165.Class 5.

Extn. of Copyright for the Third period of five years.

Nos. 149014, 149015, 157963, 157964, 149016, 149017, 149018, 155063, 148717, 148961, 148969.Class 1.

Nos. 155733, 155733, 149078, 157667, 157961, 157962, 157960, 156022, 148716, 148968, 148970, 148083.Class 3.

No. 157434.Class 5.

R. A. ACHARYA
Controller General of Patents, Designs
and Trade Marks